



# भारत का राजपत्र

## The Gazette of India

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY

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नई दिल्ली, शनिवार, जनवरी 5, 1991 (पौष 15, 1912)  
NEW DELHI, SATURDAY, JANUARY 5, 1991 (PAUSA 15, 1912)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

### भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

#### THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 5th January, 1991

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Bombay-400 013.

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Telegraphic address "PATOFFICE".

Patent Office branch,  
Unit No. 401 to 405, III Floor,  
Municipal Market Building,  
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Telegraphic address "PATENTOFIC".

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Telegraphic address "PATENTOFIS".

Patent Office (Head Office),  
"NIZAM PALACE", 2nd M.S.O. Bldg.,  
5th, 6th and 7th Floor,  
234/4, Acharya Jagdish Bose Road,  
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

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पेटेंट कार्यालय

एकस्व तथा अभिकल्प

कलकत्ता, दिनांक 5 जनवरी 1991

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोही इस्टेट,  
सीसरा तल, लोअर परेल (पश्चिम),  
बम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोआ, दमन तथा दिव एवं दावरा और नगर हवेली।

तार पता—''पेटोफिस''

पेटेंट कार्यालय शाखा,  
इकाई सं० 401 से 405, सीसरा तल,  
नगरपालिका बाजार भवन,  
सरस्वती मार्ग, करोल बाग,  
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—''पेटेंटोफिक''

पेटेंट कार्यालय शाखा,

61, बालाजाह रोड,

मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप, मिनिर्कोय तथा एमिनिदिवि द्वीप।

तार पता—''पेटेंटोफिस''

पेटेंट कार्यालय (प्रधान कार्यालय),  
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय  
मकन 5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस रोड,  
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—''पेटेंट्स''

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क : —शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य घनादेश अथवा डाक आदेश या अर्द्ध उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा चेक द्वारा की जा सकती है।

GOVERNMENT OF INDIA  
THE PATENT OFFICE

Calcutta, the 5th January 1991

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE  
234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed  
Under Section 135, of the Patents Act, 1972.

27th November 1990

- 996/Cal/90. Kapil Muni Singh, Relative Gravitational Motor.
- 997/Cal/90. Kali Sankar Biswas, Pollution-Free Preservation. (Improve Technology).
- 998/Cal/90. ICI India Limited. An improved single step catalytic transfer hydrogenation process for the preparation of p-hydroxyphenyl-acetic acid from an alkali metal salt of m-chloro-p-hydroxymandelic acid.
- 999/Cal/90. United Technologies Corporation, Liquid Jet Removal of Plasma Sprayed and Sintered Coatings.

29th November 1990

- 1000/Cal/90. Laboratori Guidotti SpA. Process for the Preparation of Amides of Cyclomethylen-1, 2-Bicarboxylic Acids Having Therapeutical Activity. Divisional dated 12 April, 1989.
- 1001/Cal/90. Laboratori Guidotti SpA. Process for the Preparation of Amides of Cyclomethylen-1, 2-Bicarboxylic Acids Having Therapeutical Activity. (Divisional dated 12 April, 1989).
- 1002/Cal/90. Punya Brata Chaudhuri, Method of Pre-Treatment of Agricultural Waste for Pulp And Paper Making and Method of Making Pulp.
- 1003/Cal/90. Punya Brata Chaudhuri, A Novel Method for Recovery of Pulp Chemicals from Black Liquors of Soda Pulping Process.

30th November 1990

- 1004/Cal/90. Chitta Ranjan Mukherjee, Improved Life Preserver at sea.

3rd December 1990

- 1005/Cal/90. General Electric Company. Plate-Like Metal Element for Electrical Resistor Grid Assembly.
- 1006/Cal/90. ~~General Electric Company~~ Fur Elektromagnetische Werkstoffe MBH. Non-Oriented Electrical Strip and Process for its Production.
- 1007/Cal/90. CRA Services Limited. A Method of Making Refractory Vessel having Increased Durability of Refractory Vessel Linings.
- 1008/Cal/90. John M. Kent. Apparatus for using Hazardous Waste to form Non-Hazardous Aggregate.

4th December 1990

- 1009/Cal/90. ICI India Limited. Process for the Production of Improved Water-in-Oil Emulsion Explosive Compositions.
- 1010/Cal/90. American Motion System. Method for Mass producing an interior magnet rotary machine and the Interior Magnet Rotary Machine Produced thereby.

APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BRANCH AT TODI ESTATES, THIRD FLOOR, SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-13

5th November 1990

- 283/Bom/90. Arjan Motiram Khaitani. Liquid petroleum cooking gas and appliances thereof.

6th November 1990

- 284/Bom/90. Plastart Electronics Pvt. Ltd. A transformerless regulated DC power supply for VHF/UHF TV signal amplifiers.
- 285/Bom/90. M/s. Harish Textile Engineers Ltd. Web mixing device.

7th November 1990

- 286/Bom/90. Mr. N. K. Rawat. Electronic choke for fluorescent tube lights.
- 287/Bom/90. Anand Shripad Wagh. Inclined roller squeezing system for sow box on sizing machine.

8th November 1990

- 288/Bom/90. Hindustan Lever Limited. 9th November, 1989, Gr. Britain. Bleaching composition.
- 289/Bom/90. Hindustan Lever Limited. 13th November, 1989, Gr. Britain. Process for preparing particulate detergent additive bodies and use thereof in detergent compositions.

9th November 1990

- 290/Bom/90. Soni Amritlal Chandulal. An attachment and system for gas operating engine for vehicle.

12th November 1990

- 291/Bom/90. Abraham Joseph. The hand Driven knock out enlarging tool.

16th November 1990

- 292/Bom/90. Babubhai Nanubhai Patel. An invention for engine without liquid fuel and pollution.
- 293/Bom/90. Babubhai Nanubhai Patel & Rashiklal Nanubhai Gajera and others. A mechanical empty gelatine cap and base making machine.
- 294/Bom/90. Babubhai Nanubhai Patel-Gajera and others. A dental medicinal soft gelatine capsule.

19th November 1990

- 295/Bom/90. Sanjeev Madhav Khurd. Tubal Clamp for standard Technic of female sterilization devised at reversibility.
- 296/Bom/90. Rohit Harischandra Parikh. Suction Tube assembly of Yarn oiling device.
- 297/Bom/90. Vinodray Nanchand. Solar Water Heater.

## CLAIM UNDER SECTION 20 (1) OF THE PATENTS ACT, 1970

The claim made by International Control Automation Finance S. A. under Section 20 (1) of the Patents Act, 1970 to proceed the application for Patent No. 166089 in their name has been allowed.

The claim made by Babcock & Wilcox Tracy Power Inc. under Section 20 (1) of the Patents Act, 1970 to proceed the application for Patent No. 166429 in their name has been allowed.

Claim made by Babcock & Wilcox Tracy Power Inc. under Section 20 (1) of the Patents Act, 1970 to proceed the application for Patent No. 165909 in their name has been allowed.

The claim made by International Control Automation Finance S. A. under Section 20(1) of the Patents Act, 1970 to proceed the application for Patent No. 166321 in their name has been allowed.

The claim made by International Control Automation Finance S. A. under Section 20(1) of the Patents Act, 1970 to proceed the application for Patent No. 166085 in their name has been allowed.

The claim made by Babcock & Wilcox Tracy Power Inc. under Section 20(1) of the Patents Act, 1970 to proceed the application for Patent No. 167109 in their name has been allowed.

## PATENTS SEALED

165391 165830 165837 165838 165902 166024 166025 166026 166027  
166028 166051 166052 166087 166088 166132 166159 166168 166219  
166220 166262 166263 166264 166265 166296 166297 166299 166311  
166319 166427 166445 166540

CAL—7  
MAS—17  
DEL—5  
BOM—2

## RENEWAL FEES PAID

141906 146176 147662 147716 148183 148184 148210 148229 148295  
 148346 148385 148673 148896 148898 149254 149298 149573 149688  
 149689 149764 149809 149811 149831 150033 150034 150180 150295  
 150303 150598 150804 150996 151028 151330 151416 151506 151549  
 151609 151708 151944 152071 152279 152514 152515 153146 153247  
 153277 153278 153315 153436 153451 153797 154418 154453 154454  
 154485 154740 154772 154870 155113 155268 155427 155428 155438  
 155469 155605 155700 155845 155935 156053 156098 156251 156586  
 156648 156745 156936 156950 157017 157159 157342 157628 157688  
 157758 158038 158200 158205 158292 158298 158395 158502 158720  
 158764 158919 159196 159383 159531 159641 159670 159781 159933  
 160962 161046 161119 161305 161515 161595 161596 161601 161631  
 161686 161840 161914 162058 162153 162166 162196 162197 162362  
 162439 162440 162463 162478 162582 162693 162704 162752 162773  
 162775 162800 162849 162850 163037 163079 163246 163332 163482  
 163498 163870 163873 163937 163971 164061 164066 164098 164184  
 164461 164472 164648 164795 164878 164884 165235 165310 165355  
 165356 165392 165541 165542 165545 165546 165548 165609 165612  
 165637 165665 165666 165717 165719 165782 165783 165785 165787  
 165790 165815 165816 165820 166197 166322 166325 166327 166361  
 166362 166368 166371 166374 166375 166377 166379 166380 166382  
 166386 166387 166388 166405

## RESTORATION PROCEEDINGS

Notice is hereby given that an application for restoration of Patent No. 159377 dated the 20th June, 1983 made by Sulzer Brothers Limited on the 26th July, 1989 and notified in the Gazette of India, Part III, Section 2 dated the 2nd December, 1989 has been allowed and the said Patent restored.

Notice is hereby given that an application for restoration of Patent No. 159376 dated the 20th June, 1983 made by Sulzer Brothers Limited on the 26th July, 1989 and notified in the Gazette of India, Part III, Section 2 dated the 2nd December, 1989 has been allowed and the said Patent restored.

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

## स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कमी भी नियंत्रक, एकस्व को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

“प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप हैं।”

नीचे सूचीगत विनिर्देशों की सीमित संख्या में मुद्रित प्रतियाँ, भारत सरकार बुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होंगी। प्रत्येक विनिर्देश का मूल्य 2/- रु० है (यदि भारत के बाहर भेजे जाएँ तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रमार उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरान्त उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रमार 4/- रु० है) फोटो लिप्यान्तरण प्रमार का परिकलन किया जा सकता है।

Ind. Cl. : 101-F & 190-C

167871

[GROUPS-XXVIII (2) & XLIV (4)].

Int. Cl. : E 02 B 9/08 & F 03 B 13/22.

A SYSTEM FOR GENERATION OF ELECTRICAL POWER FROM THE DRAG FORCE OF CANAL WATER.

Applicant & Inventor : VELLAIPPAN VELAYUDAM THIANGATHIRUPPATTIY, B.A., 33, OLAGAPPA MAISTRY STREET, CHINTADRI PET, MADRAS-600 002, INDIAN CITIZEN.

Application and Provisional Specification No. 506/Mas/86, filed on July 2, 1986.

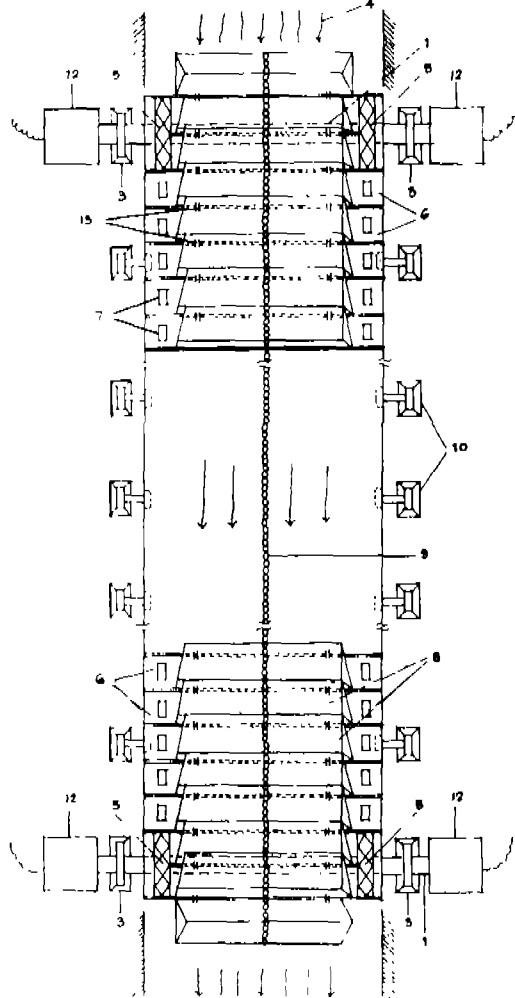
Complete Specification left September 18, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 7 Claims

A system for generation of electrical power from the drag force of canal water comprising :

two freely rotating shafts (1) fitted to two distantly placed set of frames (2) along the length of the canal having ball bearing supports (3) for holding aloft the shafts each set of frames (2), each shaft being provided with two toothed wheels (5) at either ends in such a way that the lower end of the toothed wheels just touches the canal water, a set of flat members (6) hinged together and having slots (7) at their ends which mesh with the teeth of the toothed wheels (5) to form a belt around the toothed wheels, the outer side of their flats (6) opposite to that facing the toothed wheels being flexibly connected to one of the long sides of a conical bucket (8) the center of the other long side of that conical bucket being connected to at least one chain (9) to form a freely moving loop around the toothed wheels the set of flats (6) being further guided by height adjustable guide rollers (10) fitted to posts (11) erected on both sides of the canal, making the array of buckets move in the water due to the drag force of the canal water acting on the submerge buckets resulting in the rotation of the shafts which are connected to generators (12) through gears to produce electricity.



Provisional Specification 5 Pages.  
Compl. Specn. 6 Pages.

Dr. 2 Sheets.  
Dr. 2 Sheets.

Ind. Cl. : 32-E-[GROUP-IX(1)].  
Int. Cl. : C 08 F 210/00; 212/00; 214/00; 220/00.

167872

#### A PROCESS FOR PRAPARING AN AQUEOUS POLYMER EMULSION SUITABLE FOR USING AS A BINDER OF FIBERS OR FABRICS.

Applicant : SUN CHEMICAL CORPORATION, A CORPORATION OF THE STATE OF DELAWARE, U.S.A., OF 200 PARK AVENUE, NEW YORK, U.S.A.

Inventors : (1) MARTIN K LINDEMANN, (2) KIM DEACON.

Application No. 515/Mas/86 filed on July 3, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 10 Claims No. Drawing

A process for preparing an aqueous polymer emulsion suitable for using as a binder of fibers or fabrics comprises preparing an emulsified first polymer having a known active crosslinking agent, in an amount of 0.01 to 0.5% by weight of the polymer; mixing the same with a second monomer emulsion, the said second monomer being different from the monomer of the first polymer, both the monomers of the first polymer and second monomers being ethylenically unsaturated compounds; the resulting mixture comprises 5 to 95% of solids by weight of the first polymer, allowing the mixture to equilibrate, polymerizing the resulting emulsion mixture to obtain a first polymer network intertwined on a molecular scale with the second polymer network formed by the second monomer wherein the monomers of the first polymer and second monomer are as herein described.

Compl. Specn. 29 Pages.

Dr. Nil.

Ind. Cl. : 139-B-[GROUP-IV(2)].  
Int. Cl. : C 01 B 33/02.

167873

#### A PROCESS FOR RECOVERING SILICON FROM A REACTION MIXTURE OF SILICON AND SODIUM FLUORIDE.

Applicant : ENICHEM S.P.A. A COMPANY ORGANIZED UNDER LAW OF THE ITALIAN REPUBLIC OF VIA MEDICI DEL VASCELLO, 26-MILAN. ITALY.

Inventor : KENNETH SANCIER.

Application No. 575/Mas/86 filed on July 21, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 6 Claims

A process for recovering silicon from a reaction mixture of silicon and sodium fluoride, comprising the steps of :

- adding an aqueous solution of at least one alkaline-earth metal chloride selected from calcium chloride, magnesium chloride and barium chloride to said reaction mixture to form an aqueous slurry wherein the said aqueous solution having a concentration providing a stoichiometric excess of alkaline-earth metal ion based on the total amount of fluoride ion;
- allowing the sodium fluoride in the resultant slurry to react with the alkaline-earth metal chloride concerned to form an insoluble alkaline-earth metal fluoride;

- (c) separating the silicon from said slurry by allowing said silicon to settle out by gravity;
- (d) removing the slurry by decantation to obtain the silicon, and
- (e) washing the silicon to remove the residue of alkaline-earth metal fluoride.

Compl. Specn. 8 Pages.

Drg. Nil.

Ind. Cl. : 152-E-[GROUP-XII(2)].

167874

Int. Cl.<sup>4</sup> : C 08 L 63/00.

#### AN EPOXY RESIN COMPOSITION FOR PREPARING ELECTRICAL LAMINATES.

Applicant : THE DOW CHEMICAL COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 2030 DOW CENTER, ABBOTT ROAD, MIDLAND, MICHIGAN 48640, U.S.A.

Inventor : DIANE SEXTON.

Application No. 610/Mas/86 filed on July 30, 1986.

Convention date : July 31, 1985. (No. 85 19290; Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 14 Claims

An epoxy resin composition for preparing electrical laminates comprising from 5 to 50 weight percent of an epoxy resin, from 10 to 60 weight percent of an organic solvent, a hardener and, optionally, from 5 to 60 weight percent of a bisphenol or bisphenol derivative and/or from 0.01 to 5 weight percent of an accelerator characterized in that the hardener is a polyhydric phenolic hardener and the hardener is present in an amount such that the ratio of phenolic hydroxyl groups to epoxy groups is from 0.5:1 to 2:1, and the epoxy resin composition further contains an acid having a pKa of 2.5 or less at 25°C or an ester or anhydride of such acid and the acid, ester or anhydride is present in an amount of from 0.01 to 2 weight percent.

Compl. Specn. 32 Pages.

Drg. 2 Sheets.

Ind. Cl. : 90-K-[GROUP XXXVI].

167875

Int. Cl.<sup>4</sup> : C 03 C 3/00.

#### A METHOD OF MAKING AN IMPROVED SOLDER GLASS COMPOSITION.

Applicant : OWENS-ILLINOIS TELEVISION PRODUCTS INC., A DELAWARE CORPORATION, U.S.A., OF ONE SEAGATE, TOLEDO, OHIO, 43666, UNITED STATES OF AMERICA.

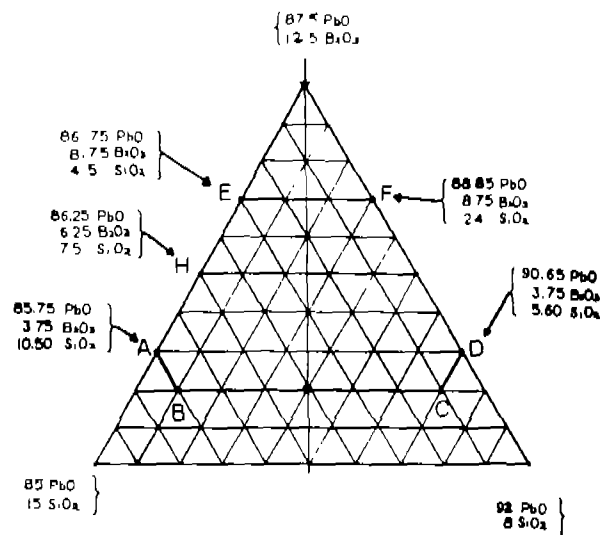
Inventor : EDWARD ALPHONSE WEAVER.

Application No. 623/Mas/86 filed on August 4, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 3 Claims

A method of making an improved solder glass composition free of  $Pb_3O_4$  comprises preparing a premelted oxide composition of  $PbO$ ,  $B_2O_3$  and  $SiO_2$  wherein the proportion of the ingredients of the premelted composition being above the line ABCD of the ternary diagram shown in the accompanying drawing, adding 0 to 15 weight percent of  $ZnO$ , 0 to 4 weight percent of  $BaO$ , 0 to 2 weight percent of  $Al_2O_3$  and 0 to 4 weight percent of  $Bi_2O_3$  and melting the mixture to obtain the solder glass composition free of  $Pb_3O_4$ .



Compl. Specn. 13 Pages.

Drg. 1 Sheet.

Ind. Cl. : 146-C & 168-F

167876

[GROUP-XXXVIII (2) & LI (4)].

Int. Cl.<sup>4</sup> : G 06 K 9/00.

#### A CRT DISPLAY SYSTEM.

Applicant : ARABIC LATIN INFORMATION OF SYSTEMS INC., (ALIS INC.), OF 3410, GRIFFITH, ST. LAURENT, QUEBEC, CANADA H 4 T 1 A 7 A CANADIAN COMPANY.

Inventors : (1) JEAN BOURBONNAIS, (2) PIERRE CADIEUX, (3) SERGE FROMENT.

Application No. 626/Mas/86 filed on August 4, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 5 Claims

A CRT display system comprising :

a CRT display screen;

a CRT controller connected to said CRT display screen for controlling the display on said CRT display screen;

video memory means connected to said CRT controller; and

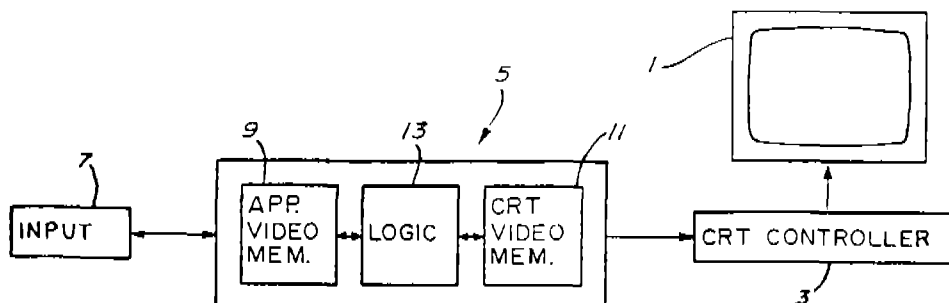
means for applying character codes to said video memory means;

said CRT controller having means to convert the character codes in said video memory to control signals for displaying the characters of the character codes in an ordered relationship on said CRT display screen;

means for displaying a primary text of a primary language, whose characters proceed in a primary direction, and a secondary text of a secondary language, whose characters proceed in a different, secondary direction;

said video memory comprising an application video memory, connected to said means for applying character codes, and a CRT video memory, connected to said CRT controller; and

logic means connecting said application video memory to said CRT video memory for manipulating said primary and secondary texts in accordance with the rules of said primary and secondary languages.



Compl. Specn. 11 Pages.

Drg. 2 Sheets.

Ind. Cl. : 56-G & 140-B2 [GROUP-V & KI (2)].  
Int. Cl.<sup>4</sup> : C 07 C 1/12.

167877

**AN IMPROVED PROCESS FOR PRODUCING MINERAL OIL FROM STORING ROCKS CONTAINING SAND, SANDSTONE AND MARLACEOUS SANDSTONE BY THE INJECTION OF CARBON DIOXIDE.**

Applicant : MAGYAR SZENHIDROGENIPARI KUTATO-  
FEJLESZTO INTEZET, OF 2443-HUNGARY, SZAZHALOM-  
BATA, PF. 32, A HUNGARIAN COMPANY.

Inventors : (1) SANDOR NEE' BAUER, (2) ZSOLT BIRO, (3)  
SANDOR DOLESCHALL, (4) EVA FARKAS, (5) GYULA  
MILLEY, (6) TIBOR PALL, (7) ANTAL SZITAR, (8) GYORGY TIS-  
ZAI, (9) JOZSEF PAPAY, (10) GEZA UDVARDI.

Application No. 634/Mas/86, filed on August 6, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Madras Branch.

4 Claims No Drawing

An improved process of producing mineral oil from storing rocks containing sand, sandstone and marlaceous sandstone by the injection of carbon dioxide or mixture of carbon dioxide and other known gases, into the storing rock, through at least one plug wherein, prior to or during injection of carbon dioxide or mixture of carbon dioxide and other gases, injecting 0.001 to 50 mol of a clay mineral stabilizing, composition having clay-effect inhibiting cations with 0.13 to 0.15 hydrated diameter and a co-ordination number 12, the said clay mineral stabilizing composition being in the form of liquid or vapour of a solution of one or more water soluble compounds of potassium, ammonium or cerconium in water or mixture of water and organic solvents.

Compl. Specn. 12 Pages.

Drg. Nil

Ind. Cl. : 32 E [GROUP IX (1)].  
Int. Cl.<sup>4</sup> : C 09 D 11/02.

167878

**A METHOD OF FORMING AN ELECTRICALLY CONDUCTIVE LAYER ON A SUBSTRATE.**

Applicant : RAYCHEM CORPORATION, A COMPANY  
ORGANIZED ACCORDING TO THE LAWS OF THE STATE OF  
CALIFORNIA, 300 CONSTITUTION DRIVE, MENLO PARK,  
CALIFORNIA 94025 U.S.A.

Inventors : (1) BATLIWALA NEVILLE, (2) OSWAL RAVI, (3)  
MCCARTY GORDON, (4) SHAPE JEFF.

Application No. 643/Mas/86, filed on August 11, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Madras Branch.

10 Claims

A method of forming an electrically conductive layer on a substrate which comprises :

- (1) printing onto the substrate a polymer thick film ink (a) which comprises (i) an organic polymer which is a polyolefin or a fluoro-polymer, (ii) a solvent for the polymer which is a latent solvent, and (iii) an known electrically conductive particulate filler, and (b) in which the organic polymer is in the form of solid particles dispersed in the solvent, and
- (2) increasing the temperature of the printed ink, while it is on the substrate, first to dissolve the polymer particles in the solvent, and then to vaporize the solvent and cure the polymer.

Compl. Specn. 15 Pages.

Drg. Nil.

Ind. Cl. : 32 E [GROUP IX (1)].  
Int. Cl.<sup>4</sup> : C 08 B 37/00, E 21 B 43/16.

167879

# A PROCESS FOR THE PREPARATION OF A MODIFIED POLYSACCHARIDE OF MICROBIAL ORIGIN.

Applicant : RHONE-POULENC SPECIALITES CHIMIQUES, A FRENCH BODY CORPORATE OF : "LES MIROIRS", 18 AVENUE d'ALSACE, 92400 COURBEVOIE, FRANCE.

Inventors : (1) PATRICK CROS, (2) ROBERT PIPON.

Application No. 652/Mas/86, filed on August, 12, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 5 Claims

A process for the preparation of a modified polysaccharide of microbial origin having high filtration performance and high viscosity enhancing power which comprises :

- acidifying an aqueous solution containing 0.05 to 35% by weight of a polysaccharide of microbial origin by adding nitric acid until the composition has a pH of 2 to 0.1,
- heating the solution to a temperature of 50 to 100°C for a period from 5 to 60 minutes,
- cooling the solution and adjusting the pH to 5 to 7 by adding a base, and
- recovering the modified polysaccharide from the reaction mixture in a known manner.

Compl. Specn 28 Pages.

Drg. 2 Sheets.

Ind. Cl. : 147 K [LX (3)].  
Int. Cl.<sup>4</sup> : G 11 B 3/12, G 11 B 3/31.

167880

# ASSEMBLY OF TRANSDUCER.

Applicant : INTERNATIONAL BUSINESS MACHINES CORPORATION, OF OLD ORCHARD ROAD, ARMONK, NEW YORK 10504, UNITED STATES OF AMERICA.

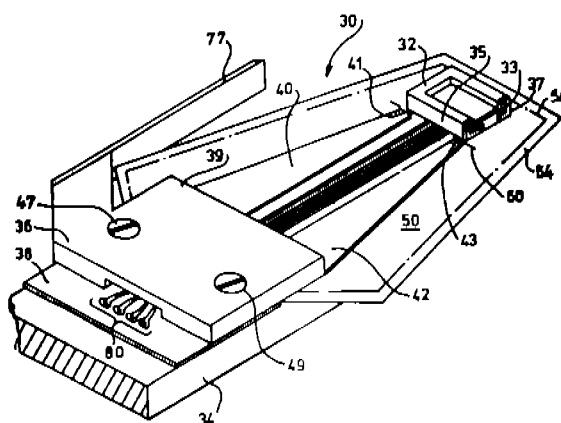
Inventors : (1) RISHI KANT, (2) DENNIS RAY MCFEEL, (3) THOMAS FRANKLIN ROTH, (4) RICHARD KEITH WILMER.

Application No. 673/Mas/86, filed on August 21, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 9 Claims

An assembly of a transducer and a support therefor comprising, an actuator arm, an inflatable envelope formed from a flexible non-elastic material with two flat surface portions the actuator arm being attached to one of the surface portions and the transducer being attached to the other surface portion, means for inflating the envelope so as to move the transducer into an operating position and for deflating the envelope so as to return the transducer to a rest position, and reinforcing members, associated with the parts of the envelope between the flat surface portions, adapted to maintain the flat surface portions substantially parallel to each other and to maintain the parts of the envelope between the flat surface portions, substantially parallel to each other, at all times when the envelope is being inflated and deflated.



Compl. Specn. 18 Pages.

Drg. 4 Sheets.

Ind. Cl. : 131 A1—[GROUP-XXVIII(3)].  
Int. Cl.<sup>4</sup> : E 21 D 11/00, F 16 L 58/00.

167881

# A MACHINE FOR FORMING TUBES FROM STRIPS.

Applicant : RIB LOC (AUST.) PTY. LTD., A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF SOUTH AUSTRALIA, OF 96 HOGARTH ROAD, ELIZABETH SOUTH 5112, SOUTH AUSTRALIA, COMMONWEALTH OF AUSTRALIA.

Inventor : STANLEY WILLIAM OTTO MENZEL.

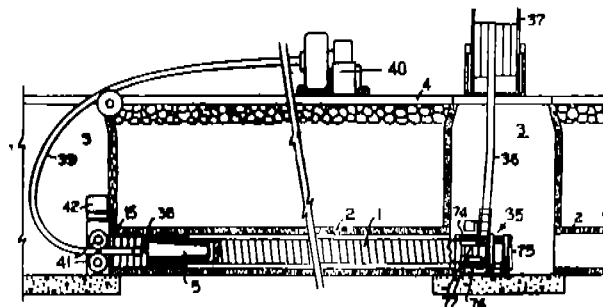
Application and Provisional Specification No. 552/Mas/86, filed on July 17, 1986.

Complete Specification left July 16, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 13 Claims

A machine for forming tubes (1) from strips in which the strip (36) has longitudinally running ribs (25) which have expanded ends (26) and at least a joining bead (21) at one edge on one face arranged to engage at least a socket (22) on the other edge on the opposite face, the machine (35) being characterised by; frame members (71, 72), an annulus of guiding rollers (73, 74) supported in bearings on the frame (71, 72), pressure rollers (77) within the annulus of guiding rollers to press the strip (36) to the guiding rollers (73, 74), means to drive at least a guiding roller (73 or 74) or a pressure roller (77), said guiding rollers (73, 74) and said pressure rollers (77) being arranged to press the strip (36) to engage the socket (22) on the bead (21) of the strip (36) when a strip is helically wound to interengage the contiguous edges, and means (80, 82) to feed the strip (36) to the rollers (73, 74) of the annulus of rollers.



Prov. Specn. 15 Pages.  
Compl. Specn. 22 Pages.

Drg. 6 Sheets.



Ind. Cl. : 131 A1-[GROUP XXVIII (3)].  
Int. Cl.<sup>4</sup> : F 16 L 58/00; E 21 D 11/00.

167882

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

# A DEVICE AND METHOD FOR MAKING A CONDUIT WITH A PROTECTIVE LINING OR OVERWRAP.

Applicant : RIB LOC (AUST.) PTY. LTD., A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF SOUTH AUSTRALIA, OF 96 HOGARTH ROAD, ELIZABETH SOUTH, 512, SOUTH AUSTRALIA. COMMONWEALTH OF AUSTRALIA.

Inventor : STANLEY WILLIAM OTTO MANZEL.

Application and Provisional Specification No. 554/Mas/86, filed on July 17, 1986.

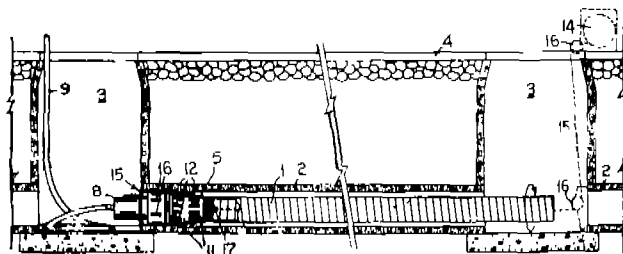
Application and Provisional Specification No. 555/Mas/86 dated 17th July, 1986 cognated with Provisional Specification No. 554/Mas/86.

Complete Specification left : July 16, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 18 Claims

A device for making a conduit with a protective lining or overwrap comprising means (35) for winding having an annulus of rollers (73, 74) and pressure rollers (77) arranged to define an helix during winding of the tube (1), means to feed strip (36) to the said rollers (73, 74, 77) means to provide a slip control medium at the edges of the strip (39), means (75) for driving the said rollers (73, 74) of the annulus so as to project the tube (1) into the conduit (2), a tube expander (5) having means (11, 12, 45, 57-61) to wind and expand the tube (1) and means (16, 38-39, 49-51) to drive the expander (5) along tube (1) progressively so as to expand the said tube.



Prov. Specn. 18 Pages.

Compl. Specn. 28 Pages.

Drg. 6 Sheets.

Ind. Cl. : 32 F 2 (a) [GROUP IX (1)].  
Int. Cl.<sup>4</sup> : C 07 C 91/44.

167883

# AN IMPROVED PROCESS FOR PREPARING N-ALKYLAMINOPHENOLS.

Applicant : SUMITOMO CHEMICAL COMPANY, LTD., A JAPANESE COMPANY OF NO. 15, KITAHAMA 5-CHOME, HIGASHI-KU, OSAKA-SHI, OSAKA, JAPAN.

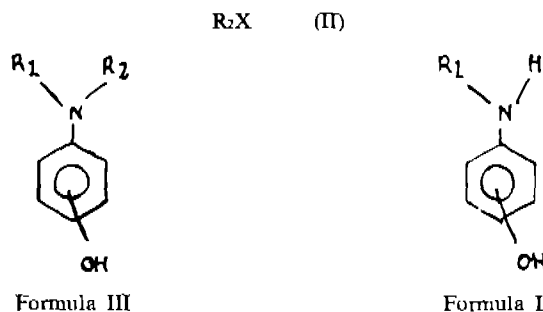
Inventors : (1) HARUHI SA HARADA, (2) HIROSHI MAKI, (3) SHIGERU SASAKI.

Application No. 683/Mas/86, filed on August 26, 1986.

2—G—397 GI/90

## 11 Claims

An improved process for preparing N-alkylaminophenols represented by the formula III of the accompanying drawings, wherein R<sub>1</sub> represents a hydrogen atom or an alkyl group having from 1 to 6 carbon atoms; and R<sub>2</sub> represents an alkyl group having from 1 to 6 carbon atoms, which process comprises reacting an aminophenols represented by the formula I of the accompanying drawings, wherein R<sub>1</sub> is as defined above, with an alkyl halide represented by the formula (II) :



wherein R<sub>2</sub> is as defined above; and X represents a halogen atom, in an autoclave in the presence of water at a temperature from 60° to 140° C and pressure of from 3 to 30 kg/cm<sup>2</sup>G for a period of from 1 to 24 hours and by using ammonia as an acid scavenger, wherein the amount of ammonia is from 1 to 3 mols per mol of the aminophenol represented by the formula I of the accompanying drawings and recovering N-alkylaminophenols in a known manner.

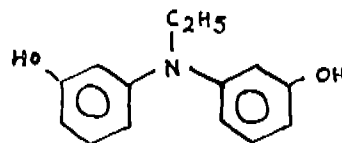


Fig. 1

Compl. Specn. 22 Pages.

Drg. 1 Sheet.

Ind. Cl. : 179 E, F [GROUP XL (6)].  
Int. Cl.<sup>4</sup> : B 65 D 43/00.

167884

# METHOD OF MAKING METAL CAN ENDS WITH PLASTICS CLOSURES.

Applicant : METAL BOX P.L.C., A COMPANY INCORPORATED UNDER THE LAWS OF GREAT BRITAIN, OF QUEENS HOUSE, FORBURY ROAD, READING RG 1 3 JH, UNITED KINGDOM.

Inventors : (1) MARTIN FRANK BALL, (2) ANDREW PHILIP PAVELY, (3) JOSEPH STANLEY TAYLOR.

Application No. 731/Mas/86, filed on September 12, 1986.

Convention dated 20-9-85 No. 8523263 (United Kingdom).

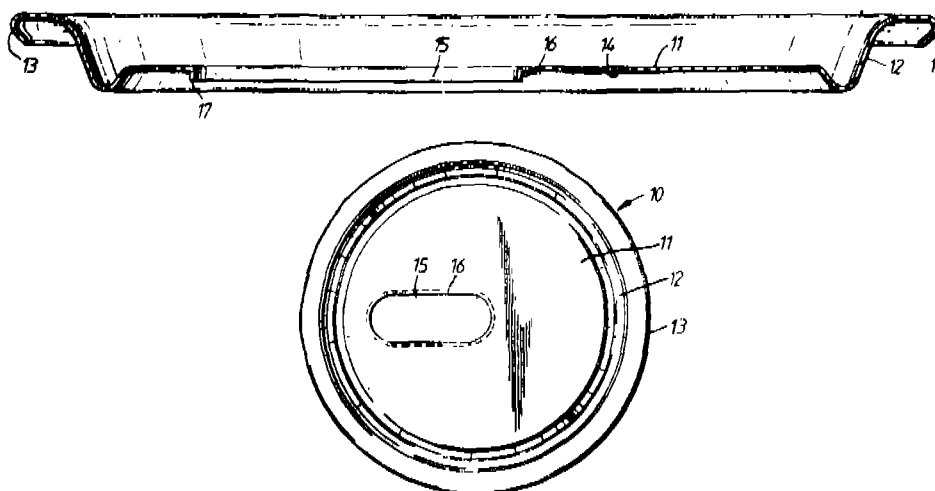
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 23 Claims

A method of making a metal can end with a central panel and a tear-open plastics closure in said panel, for a can intended to resist leakage when subject to internal pressures, comprising the steps of :

- (a) providing the undersurface of the metal can end with a coating of plastic material,
- (b) piercing the central panel of the metal can end to form an aperture surrounded by downturned flange extending around the periphery of the aperture and extending away from the central panel at an angle of between  $80^\circ$  and  $120^\circ$  to the plane of the central panel and having a substantially flat end surface, and

- (c) injection moulding on to the can end, without additional heating of the metal, a one-piece ring pull closure of a plastic material which is resistant to softening at temperature up to at least  $65^\circ\text{C}$ , in such manner that the plastics material of the closure fills the aperture and surrounds it on both surfaces of the can end and bonds with the plastics material of the coating, the thickness of the plastics material of the closure being chosen so as to enclose the downturned flange totally, with a residual thickness below the flat end surface of the flange in the range from 0.08 to 0.5 mm, so as to enable the closure to resist distortion resulting from creep at temperatures up to at least  $35^\circ\text{C}$ , but to be capable of being sheared against the flat end surface of the flange when the ring pull is pulled manually.



Compl. Specn. 23 Pages.

Drw. 12 Sheets.

Ind. Cl. : 47-A-[GROUP-XXXII(1)].

167885

Int. Cl.<sup>4</sup> : C 10 B 19/00.

#### PROCESS AND APPARATUS FOR MANUFACTURING COKE.

Applicant : USINOR-ACIERS OF IMMEUBLE "ILE-DE-FRANCE", 4 PLACE DE LA PYRAMIDE, CEDEX 33-92070 PARIS LA DEFENSE, FRANCE.

Inventors : (1) JEAN ARMAND GHISLAIN CORDIER, (2) BERNARD EMILE ANDRE DUSSART, (3) PIERRE HENRI ROLLOT.

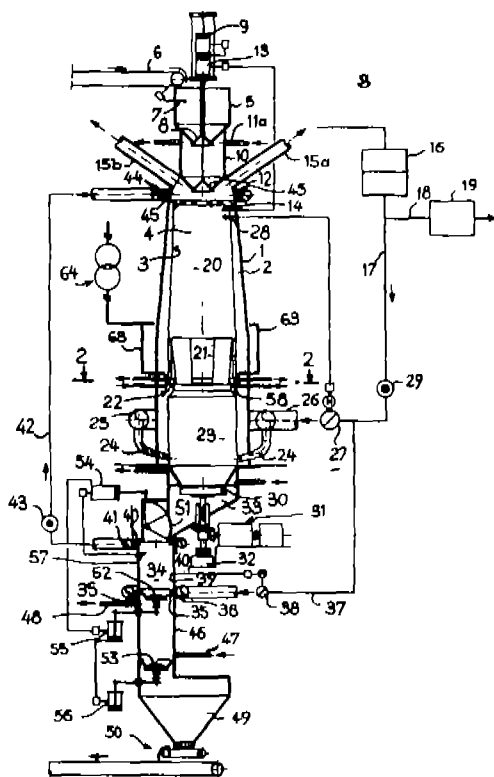
Application No. 747/Mas/86 filed on September 23, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 22 Claims

A process for manufacturing moulded coke in a vertical tank furnace of the type comprising in its upper part sealed means for introducing a charge of raw avoids of coal previously moulded by compacting, and means for recovering the gases produced, and in its

lower part sealed means for discharging the cooled coke, and means for introducing a gas current; characterised by circulating a recycled gas current in an ascending direction in counter-current to the descending charge of avoids of moulded coal constituting a descending moving bed; subjecting the avoids of moulded coal to a pre-heating and de-volatilization step in a first one corresponding to the upper part of the furnace, then to a carbonization and coking step in a second zone corresponding to the median part of the furnace, and to a cooling step for cooling the coked avoids in a third zone corresponding to the lower part of the furnace; recovering at the top of the furnace, the top gases produced by the distillation and coking of the coals; and recycling a fraction of said top gases so as to constitute the recycled gas current, introducing a first part of the fraction of the recycled top gases to the base of the third zone so as to ensure a primary cooling of the coke; and introducing the rest of the fraction of the recycled top gases in the form of a secondary cooling current, flowing in counter-current to the mass of coke issuing from the third zone, in a fourth zone connected in a sealed manner to the outlet of the third zone; thereafter, withdrawing the secondary cooling current from the fourth zone and re-introducing it at the top of the furnace for diluting the gases produced and maintaining the recovering means for said gases at a temperature which is sufficiently high to prevent any condensation; and discharging the cold coke from the fourth zone through a sealed lock-compartment.



Compl. Specn. 48 Pages.

Drg. 7 Sheets.

Ind. Cl. : 110-[GROUP-XXI(2)].  
Int. Cl.<sup>4</sup> : D 04 B 27/34.

167886

**A FABRIC TAKE DOWN MECHANISM FOR HAND OPERATED FLAT KNITTING MACHINES.**

Applicant : THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION, COIMBATORE AERODROME P.O., COIMBATORE-641 014, TAMIL NADU, INDIA, A SOCIETY REGISTERED UNDER THE SOCIETIES REGISTRATIN ACT, 1860.

Inventors : (1) TARAKAD VEDAMURTHY RATNAM, (2) SENNIMALAI GOUNDER RAMASWAMY.

Application and Provisional Specification No. 781/Mas/86, filed on October 3, 1986.

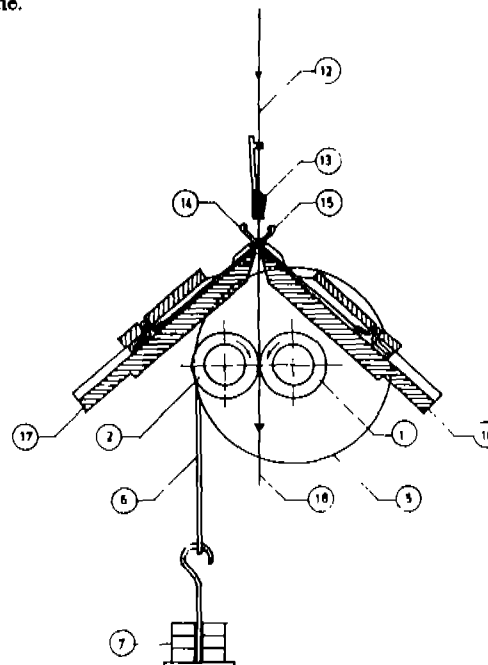
Complete Specification left May 28, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

2 Claims

A fabric take down mechanism for hand operated flat knitting machines comprising two fluted rollers (1, 2) having lengths equivalent to the operational width of the knitting machine, movable housings (8) on either ends of the rollers, coil springs (9) for holding the rollers under pressure by acting pressure on the movable housing, tightening or loosening bolts (10) for varying the pressure exerted on the nip of the rollers according to the fabric to be knitted to avoid slippage of the fabric, pulleys (5) fixed on either ends of the fluted roller (1), rope (6) with one end attached to the periphery of the pulleys

and with the other end attached to dead weights (7), a cam plate (11) for separating the nip of the rollers while passing the fabric between the rollers or for repositioning the weights and a bracket (4) for fixing the mechanism in close proximity to frame (3) of the knitting machine.



Prov. Specn. 10 Pages.

Compl. Specn. 12 Pages.

Drg. 2 Sheets.

Ind. Cl. : 107 C & G [GROUP XLVI (2)].  
Int. Cl.<sup>4</sup> : 02 B 39/00.

167887

**AN INTERNAL COMBUSTION ENGINE.**

Applicant & Inventor : BERNARD HOOPER, OF HIGH WOODLAND, LITTLE GAIN, HILTON, NR BRIDGNORTH, SHROPSHIRE WV 15 5PA, UNITED KINGDOM, A BRITISH SUBJECT.

Application No. 810/Mas/86 filed on October 14, 1986.

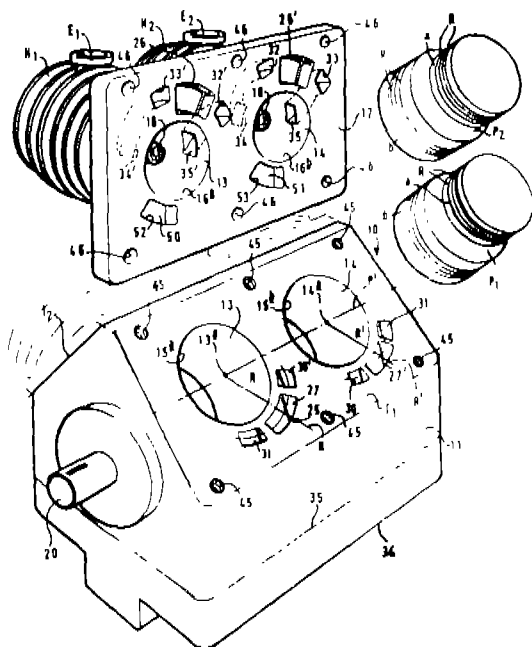
Convention date : October 19, 1985; (No. 8525854; United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

19 Claims

An internal combustion engine comprising at least one pair of cylinders each containing a stepped piston, each cylinder and piston having a pumping part of larger diameter and a working part of smaller diameter, the working part of each cylinder being charged by precompressed charge being a mixture of air and fuel, or air alone delivered from the pumping part of the other cylinder, a crank case and at least one cylinder block secured to the crank case at an interface, the crank case and the at least one cylinder block together defining the two cylinders in which the stepped pistons are slidable, the pistons each being connected to a crank shaft mounted in the crank case, a transfer path along which the precompressed charge flows from the pumping part of each cylinder to the working part of the

other cylinder in which the charge is ignited, each transfer path comprising first, second and third passage parts, the first passage part communicating with the pumping part of one cylinder and the second passage part and the third passage part comprising at least two branches each communicating with the second passage part and the working part of the other cylinder, characterised in that the first and third passage parts each cross the interface between the crank case and the at least one cylinder block via aligned ports in the crankcase and the at least one cylinder block and the second passage part is wholly contained within the crankcase.



Compl. Specn. 18 Pages.

Drg. 2 Sheets.

Ind. Cl. : 107 K [GROUP XLVI (2)].

167888

Int. Cl.<sup>4</sup> : F 02 C 7/232.

### FUEL FLOW CONTROL VALVE.

Applicant : NORMALAIR-GARRETT (HOLDINGS) LTD., WESTLAND WORKS, YEovil, SOMERSET, ENGLAND, A BRITISH COMPANY.

Inventors : (1) PETER JOHN ROWLAND, (2) NEVILLE FERGUSON ADAMS, (3) RONALD ERIC SHORT.

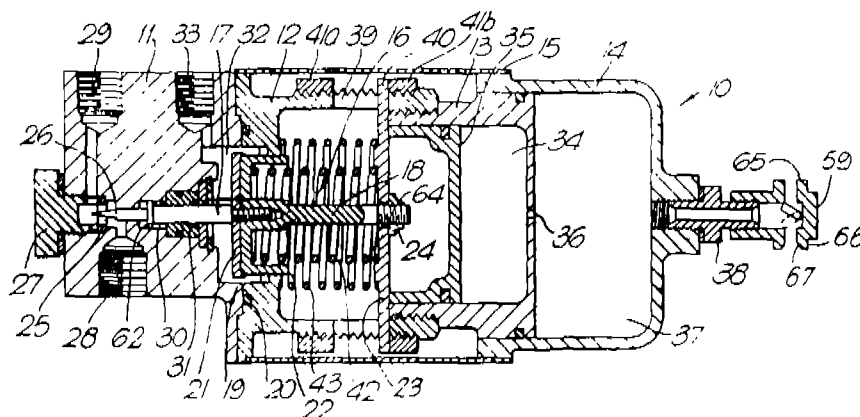
Application No. 825/Mas/86 filed on October 20, 1986.

Convention dated 4-11-1985 No. 8527146 (United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 10 Claims

A fuel flow control valve (10) for controlling the flow of fuel to a two speed gas turbine comprising in combination; a valve body (12, 13), a fuel passageway (26, 28, 29) in the valve body, a valve (17) slidably mounted in the valve body and movable to vary the fuel flow through the passageway, spring means (42) housed in the valve body for urging the valve towards a start up position within the passageway to permit a fuel flow therethrough, first (32) and second (34) variable volume fluid pressure chambers within the valve body, first pressure responsive means (19) operatively connected to the valve and responsive to pressure in the first pressure chamber to overcome the force of the spring and move the valve in a first direction to an idle position to permit an increased fuel flow through the passageway and second pressure responsive means (23) operatively connected to the valve and responsive to pressure within the second pressure chamber to move the valve in the opposite direction to a run position to permit a reduced fuel flow through the passageway.



Compl. Specn. 18 Pages.

Drg. 2 Sheets.

Ind. Cl. : 172-D2-[GROUP-XX].  
Int. Cl.<sup>4</sup> : D 01 H 9/02.

167889

### AN APPARATUS FOR SUPPLYING CONICAL BOBBINS TO THE WINDING STATIONS OF A TEXTILE MACHINE.

Applicant : SCHUBERT & SALZER MASCHINENFABRIK AKTIENGESELLSCHAFT, OF FRIEDRICH-EBERT-STRASSE 84, 8070 INGOLSTADT, GERMANY, A GERMAN COMPANY.

Inventors : (1) WALTER MAYER, (2) JOHANN HAHN, (3) RUPERT KARL.

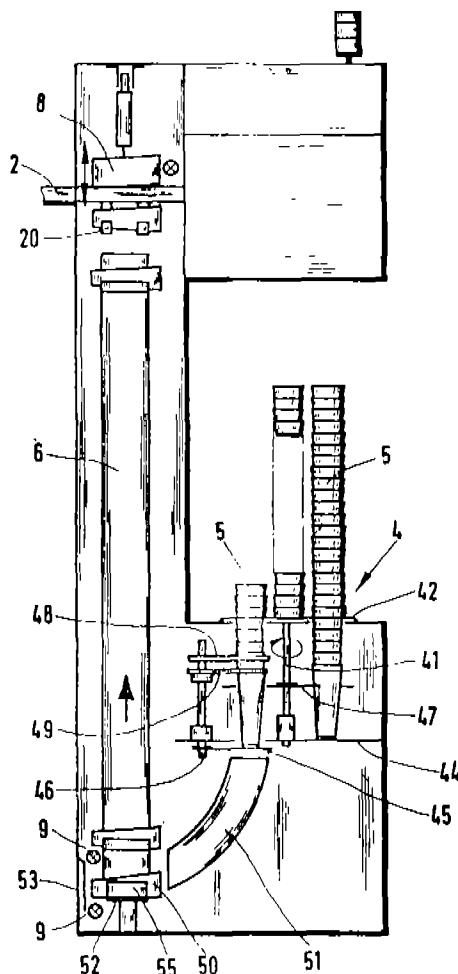
Application No. 861/Mas/86 filed on November 4, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 16 Claims

An apparatus for supplying conical bobbins to the winding stations of a textile machine comprising a bobbin magazine in which

at least one bobbin column formed by conical bobbins which are placed in one another is arranged and means provided for separating the bobbins, wherein between the bobbin magazine and a conveyor belt extending over all winding stations there is provided a conveyor for a separated bobbin which maintains means for transporting the bobbin into a conveying position and means for transporting the bobbin in the conveying position to the conveyor belt.



Compl. Specn. 16 Pages.

Drq. 4 Sheets.

Ind. Cl. : 172-A-[XX].  
Int. Cl.<sup>4</sup> : B 65 H 54/02.

167890

**DEVICE FOR WINDING UP A THREAD TO A PACKAGE ON ROTATABLE, CONICAL BOBBIN TUBE.**

Applicant : MASCHINENFABRIK RIETER AG., A BODY CORPORATE ORGANISED UNDER THE LAWS OF SWITZERLAND, OF WINTERTHUR, SWITZERLAND.

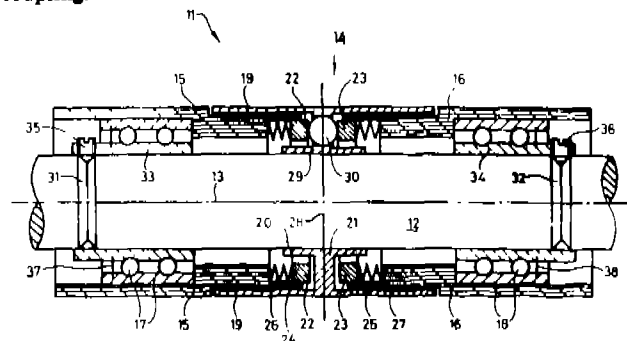
Inventors : WALTER FRETZ, WALTER HEFTI.

Application No. 913/Mas/86 filed on November 27, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 12 Claims

Device for winding up a thread to a package on rotatable, conical bobbin tube by means of a rotatable drive roller (11) which comprises cylindrical rotational elements (14, 15, 16) arranged axially adjacent on a common drive shaft (12), the central rotational element (14) being fixedly secured to the shaft and a lateral element being disposed at each end of the central element on a respective rotational bearing located on the shaft and the elements being arranged in engagement with the bobbin tube or package along a generatrix for rolling engagement in operation, the lateral elements being connected together by a differential transmission, wherein the differential transmission serving for coupling of the lateral elements (15, 16) being a friction coupling.



Compl. Specn. 11 Pages.

Drq. 1 Sheet.

Ind. Cl. : 32 E.  
Int. Cl.<sup>4</sup> : C 08 F 4/42.

167891

**PROCESS FOR THE MANUFACTURE OF POLYMERS WHICH CONDUCT ELECTRIC CURRENT FROM POLYMERS CONTAINING ETHYLENIC UNSATURATIONS.**

Applicant : SOCIETE NATIONALE DES POUDRES ET EXPLOSIFS, OF 12 QUAI HENRI IV-75181 PARIS CEDEX 04-FRANCE FRENCH NATIONALITY.

Inventors : MICHEL FONTANILLE, NICOLAS KRANTZ, JEAN-CLAUDE GAUTIER AND SERGE RAYNAL.

Application for Patent No. 297/Del/86 filed on March 31, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

## 11 Claims

Process for the manufacture of a polymer which conducts electric current from a polymer containing ethylenic unsaturations characterised in that it comprises the following steps :

- (a) reacting the polymer containing ethylenic unsaturations in the presence of a hydrosilylation catalyst such as herein described with a silane compound of the following general formula :



in which :

$R_1$  denotes a hydrocarbon group containing at least one heteroatom such as herein described bearing mobile electrons and,

$R_2$  and  $R_3$ , which may be identical or different, be hydrogen, methyl or a group  $R_4$

(b) precipitating the resultant polymer by adding to the reaction medium a non-solvent compound or mixture of compounds as herein described in which the said polymer is insoluble, and

(c) separating the precipitated polymer in any known manner from the reaction medium.

Compl. Specn. 22 Pages.

Drg. 1 Sheet.

Ind. Cl. : 32 B.

167892

Int. Cl.<sup>4</sup> : G 07 C-4/16.

#### PROCESS FOR PRODUCING HYDROCARBON-CONTAINING LIQUIDS FROM BIOMASS.

Applicants : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., A NETHERLANDS COMPANY, OF CAREL VAN BYLANDTLEEN 30,2596 HR THE HAGUE, THE NETHERLANDS.

Inventors : JOHANNES HENRICUS JOSEPHUS ANNEE & HERMAN PETRUS RUYTER.

Application for Patent No. 413/Del/1986 filed on May 6, 1986.

Convention date 8 May, 1985/8511587/(U.K.).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

#### 10 Claims

Process for producing hydrocarbon-containing liquids from biomass, which comprises introducing pre-treated biomass, said biomass being selected from comminuted trees, leaves, plants, grasses, chopped straw, bagasse and other agricultural waste materials, manure, municipal waste, peat and brown coal, into a reaction zone at a temperature of from 300° to 380°C in the presence of water at a pressure higher than the partial vapour pressure of water at the prevailing temperature, keeping the biomass in the reaction zone for a period of from 30 seconds to 30 minutes; separating, in a two-phase separator by means of settling, filtration or centrifugal force, solids from the mixture of solids and fluid leaving the reaction zone while maintaining the remaining fluid in a single phase, and subsequently separating the fluid in any known manner into gas, substantially aqueous liquid and hydrocarbon-containing liquid in one or more separation zones by using a lower temperature and pressure in each subsequent zone.

Compl. Specn. 17 Pages.

Drg. 1 Sheet.

Ind. Cl. : 89.

167893

Int. Cl.<sup>4</sup> : G 01 M 3/00.

#### A MACHINE FOR LEAK TESTING PARTS BY THE "PEN-TRATION" METHOD.

Applicant : ALCATEL, A FRENCH BODY CORPORATE, OF 12 RUE DE LA BAUME 75008 PARIS, FRANCE.

Inventor : GILLES VEYRAT.

Application for Patent No. 536/Del/1986 filed on June 17, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

#### 3 Claims

A machine for leak testing parts e.g. electronic integrated circuits, by the "Penetration" method, the machine comprising :

a pivoting test chamber having an open first end and an opposite closed second end, said chamber being pivotable about a horizontal axis;

a loading chute for loading said test chamber with said parts;

a docking member capable of controllably putting the open end of said pivoting chamber into sealed communication with a leak detector;

an unloading chute having first and second paths selectable by switch means; and

means for tilting said pivoting chamber to occupy three distinct positions :

a first position in which the pivoting chamber tilts upwardly above the horizontal at an angle  $\alpha$  and is in alignment with said loading chute;

a second position in which the pivoting chamber is horizontal and in alignment with said docking member; and

a third position in which the pivoting chamber tilts downwardly below the horizontal at an angle  $\beta$  and is in alignment with the unloading chute;

said angles  $\alpha$  and  $\beta$  being sufficient to ensure that said part to be tested moves along said chamber solely under the effect of gravity.

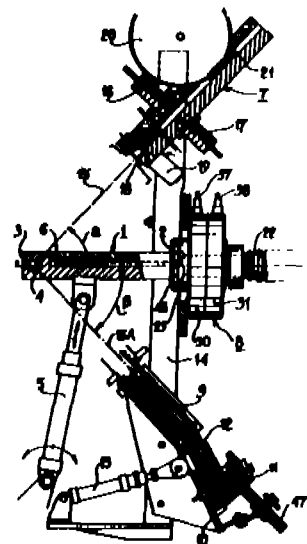


Fig. 1

Compl. Specn. 8 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 134AC, 158D &amp; 160A.

167894

Int. Cl.<sup>4</sup> : B 62 D, 55/075, 55/26, 37/04 & EOIC 19/26.**TRACKED VEHICLE HAVING OBSTACLE SURMOUNTING AID.**

Applicant : THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY'S GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, A BRITISH CORPORATION SOLE OF WHITEHALL, LONDON SW1A 2HB, ENGLAND.

Inventors : PETER JAMES GIBSON, DAVID ROLAND BEARD & CHRISTOPHER BANCROFT HINCHEY.

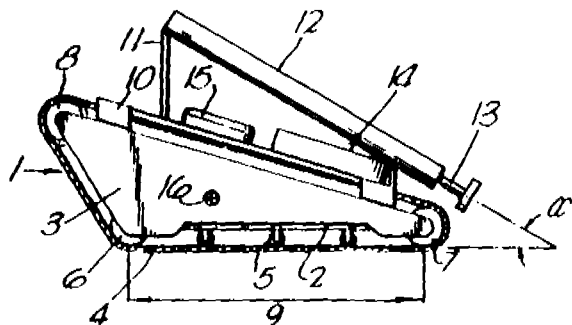
Application for Patent No. 950/Del/86 filed on October 28, 1986.

Convention date : 29th October 1985/8526602/U.K.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**7 Claims**

A tracked vehicle comprising a chassis (2), at least one track (4) passing round said chassis (2), and an obstacle surmounting aid comprised by at least one cylinder (12) mounted on said chassis (2) so as to be extendible in a rearwards direction, at least one ram (13) slidable in said cylinder and a pneumatic energizing means (14) mounted on said chassis (2) and connected to said at least one ram (13) for energizing said at least one ram (13).



Compl. Specn. 7 Pages.

Drg. 1 Sheet.

Ind. Cl. : 188 (XXXIII)(9)/70C.

167895

Int. Cl. : C 23 C 22/13.

**IMPROVED BLACK CHROMIUM PLATING BATH USEFUL FOR SOLAR SELECTIVE COATINGS.**

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAFTI MARG, NEW DELHI-110001.

Inventors : VATIA KRISHNAMURTHY WILLIAM GRIPS, INDIRA RAJAGOPAL & SUNDARAPANDIUN RAMA RAJAGOPALAN.

Application for Patent No. 1017/Del/86 filed on November 21, 1986.

Complete Specification left on 11 September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**5 Claims**

An improved black chromium plating bath useful for solar selective coatings which comprises mixture of an aqueous solution of sulphate free chromic acid and a catalyst consisting of ions of nitrate borate and fluorosilicate wherein the proportion of ingredients is :

(a) Ions of nitrate : 2-20 gpl

(b) Ions of borate : 3-40 gpl

(c) Ions of fluorosilicate : 0.2-5 gpl

(d) The remaining being sulfate free chromic acid, at room temp.

Prov. Specn. 3 Pages.

Compl. Specn. 9 Pages.

Drg. Nil.

Ind. Cl. : 24E (LV).

167896

Int. Cl.<sup>4</sup> : B 61 H 13/00.**A SPRING BRAKE ACTUATOR FOR A RAIL VEHICLE BRAKE UNIT.**

Applicant : SAB NIFE AB, A SWEDISH COMPANY OF BOX 515, S-261 24 LANDSKRONA, SWEDEN.

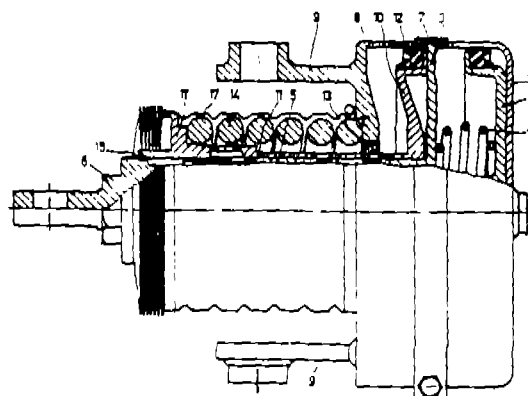
Inventors : FRED SOREN EMILSSON & KRISTER EGIL LJUNG.

Application for Patent No. 1020/Del/86 filed on November 24, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**5 Claims**

A spring brake actuator for a said vehicle brake unit having a cylinder (2, 3), a piston (1) axially movable in said cylinder (2, 3) an outwardly extending force-transmitting means (6) connected to said piston (1) and a rod shaped member (5) integral with the bottom (3) of said cylinder (2, 3), said actuator comprising a cylindrical housing (b), an actuator piston (10) having a piston rod (11) axially movable in housing (8), a spring (14) mounted between said housing (8) and said piston rod (11) to act in the brake applying direction, characterised in that said brake actuator is an integral self contained unit mounted on said rod-shaped member (5), said housing (8) being connected to said cylinder (2, 3) the piston rod (11) of the actuator being tubular and slidably mounted on said rod-shaped member (5) acting on said outwardly extending force-transmitting means (6).



Compl. Specn. 7 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 35 E.  
Int. Cl.<sup>4</sup> : C 04 B 35/04.

167897

# **GUNNING COMPOSITION OR MIX USED FOR HOT REPAIRING THE LINING OF METALLURGICAL FURNACES AND A PROCESS FOR ITS PREPARATION.**

Applicant : STEEL AUTHORITY OF INDIA LTD., RESEARCH & DEVELOPMENT CENTRE FOR IRON AND STEEL, A GOVT. OF INDIA ENTERPRISE HAVING ITS REGISTERED OFFICE AT ISPAT BHAVAN, LODHI ROAD, NEW DELHI-110 003.

Inventors : SWAPAN KUMAR GARAI, SUBRATA BARUA, PRASANTA NANDI AND AJAY KUMAR DASGUPTA.

Application for Patent No. 1099/Del/86 filed on December 15, 1986.

Complete Specification left on 27th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

## **9 Claims**

A process for preparing a gunning composition or mix for hot repairing of the lining of metallurgical furnaces comprising charging 60-80% of coarse (0-3 mm) dead burnt magnesite of the composition as herein described in a dry pan mixer, adding 10-20% of fine dead burnt magnesite of size less than 0.5 mm prepared from 2-6 mm grain and mixing the charge, adding into the mixture 10-20% of (0-3 mm) mag-chrome/chrome-mag briq powder and adding binders containing 2-5% magnesium sulphate, 2-5% slag fines of the kind or as herein described and 2-5% of less than 0.5 mm size coal tar pitch fines of the total weight under atmospheric pressure and ambient temperature to produce the gunning composition or mix.

Compl. Specn. 20 Pages.  
Prov. Specn. 13 Pages.

Ind. Cl. : 102D.  
Int. Cl.<sup>4</sup> : E 02 B 5/04.

167898

# **WAVE GENERATOR FOR GENERATING ARTIFICIAL SWELL IN AN EXPERIMENTAL TANK AND A MARINE ENGINEERING TEST TANK INCORPORATING THE SAME.**

Applicant : PRINCIPIA-RECHERCHE-DEVELOPMENT SA, OF PLACE SOPHIE-LAFFITTE, BP 22, SOPHIA-ANTIPOLIS 06560 VALBONE, FRANCE.

Inventors : PIERRE GUEVEL & ERIC LANDEL.

Application for Patent No. 1079/Del/86 filed on December 9, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

## **3 Claims**

A wave generator for generating artificial swell in an experimental tank used in marine engineering, comprising a beater formed by a cylindrical float (1) which, when in use, is located substantially

parallel to the rear wall (2) of the tank characterised in that, said float comprises a rear end (4) constituting the generator of the said cylinder, which is substantially vertical and generally parallel to said rear wall (2) of the tank, a front end (5) having substantially pointed, nose shape and a ram cylinder (3) linked to said float to impart a rocking motion thereto.

Compl. Specn 7 Pages.

Drg. 2 Sheets.

Ind. Cl.<sup>4</sup> : 155E.  
Int. Cl.<sup>3</sup> : D 06 F 59/00, D 21 F 5/02, D 21 J & 1/06.

167899

# **A PAPER MACHINE DRYER FOR USE WITH A PAPER MACHINE.**

Applicant : SCAPAPORITT LIMITED, A BRITISH COMPANY, OF CARTMELL ROAD, BLACKBURN, LANCASHIRE BB 2 2 SZ, ENGLAND.

Inventors : TIMOTHY NOEL ASHWORTH & BRIAN GEORGE LITTLER.

Application for Patent No. 1105/Del/86 filed on December 16, 1986.

Convention date December 21st 1985/8531540/United Kingdom.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

## **6 Claims**

A papermachine dryer for use with a paper machine which comprises at least one upper dryer (11) roller, at least one lower roller (12) and one or more dryer (13) fabric extending between and partially about said rollers (11, 12) characterised in that the surface of at least one of said one or more dryer fabric (13) extending around and carried by said rollers (11, 12) about which said one or more dryer fabric partially extends, has a plurality of (18) ribs, said roller having a plain surface, said ribbed surface (18) and the opposing surface in contact therewith in conjunction defining an enhanced (19) void space to receive, at least in part, the air compressed between the dryer fabric (13) and roller on movement of said dryer fabric into engagement with said (11, 12) roller.

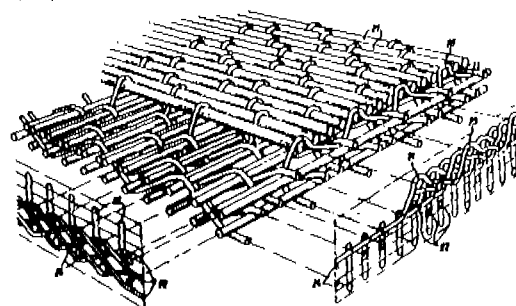


Fig. 3

Compl. Specn. 10 Pages.

Drg. 3 Sheets.

Ind. Cl. : 32 E IX (1).  
Int. Cl.<sup>4</sup> : C 08 F 110/00.

167900

# **PROCESS FOR MANUFACTURING COMPOSITIONS OF MODIFIED POLYMERS OF ETHYLENE.**



Applicant : SOCIETE CHIMIQUE DES CHARBONNAGES, A FRENCH LIMITED COMPANY, OF TOUR AUREORE, PLACE DES REFLETS, F-92080 PARIS LA DEFENSE-CEDEX 5 (FRANCE).

Inventors : JOEL ADUREAU & EDOUARD PIECUCH.

Application for the Patent No. 1108/Del/86 filed on December 17, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

8 Claims

Process for manufacturing compositions of modified polymers of ethylene comprising a polymer (A) containing at least 80 mol% of units derived from ethylene and at most 20 mol% of units derived from at least one  $\alpha$ -olefin having from 3 to 12 carbon atoms, with at least one free-radical initiator at a temperature above the melting point of the said polymer (A) for a time longer than or equal to one tenth of the half-life of the said initiator at the said temperature, characterized in that dispersing the free radical initiator, prior to being brought into contact with the polymer (A), in at least one polymer phase (B) comprising at least one polymer containing at least 90 mol% of units derived from at least one  $\alpha$ -olefin having from 3 to 12 carbon atoms and at most 10 mol% of units derived from ethylene, the said phase (B) being present in an amount such that its proportion in the resulting composition is between 0.2 and 10% by weight of the composition.

Compl. Specn. 15 Pages.

Drg. Nil.

Ind. Cl. : 89 E, 98 G [GROUP VII (2)].  
Int. Cl.<sup>4</sup> : F 25 B 15/00, F 25 B 17/00.

167901

AN APPARATUS FOR THERMAL TREATMENT OF SUBSTANCES SUCH AS ZEOLITE.

Applicant : JEUMONT-SCHNEIDER, A FRENCH COMPANY, OF 31, 32 QUAI DE DION BOUTON, 92811 PUTEAUX CEDEX, FRANCE.

Inventor : GERARD PAEYE.

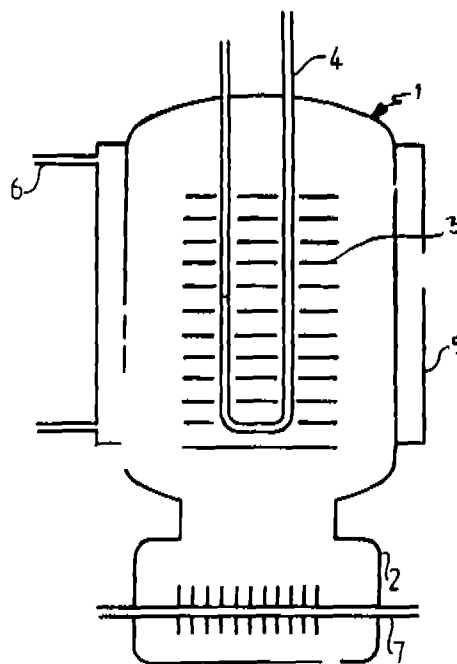
Application No. 595/Mas/86 filed on July 28, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

2 Claims

An apparatus for thermal treatment of substances such as zeolite comprising a reactor of the adsorption-desorption type, a condenser, an evaporator, a first hermetic cylindrical tank (1) having a first hydraulic circuit (4), the periphery of the said first tank (1) being provided with an envelope constituting the said condenser (5) with the outer walls of the first tank (1), the said condenser (5) being connected to a second hydraulic circuit (6) and the said evaporator consists of a second tank (2) located below the said first tank (1), said second tank (2) having a third hydraulic circuit (7), the said hydraulic circuits (4, 6, 7) being provided for heat exchange.

3—G—397 GI/90



Compl. Specn. 6 Pages.

Drg. 1 Sheet.

Ind. Cl. : 88-D & 139-D-[GROUPS-XXXII(3) & IV(2)]. 167902  
Int. Cl.<sup>4</sup> : C 01 B 3/26.

A PROCESS FOR THE PREPARATION OF SYNTHESIS GAS FROM A GASEOUS OR LIQUID HYDROCARBON-CONTAINING FEED.

Applicant : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., OF CAREL VAN BYLANDT LAAN 30, 2596 HR, THE HAGUE, THE NETHERLANDS, A COMPANY ORGANIZED UNDER THE LAWS OF THE NETHERLANDS, A RESEARCH COMPANY.

Inventors : (1) JAKOB VAN KLINKEN, (2) BERNARDUS HERMAN MINK, (3) JOHANNES DIEDERICUS DE GRAAF.

Application No. 602/Mas/86 filed on July 29, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

4 Claims

A process for the preparation of synthesis gas from a gaseous or liquid hydrocarbon-containing feed which comprises the following steps :

- (a) 50-99 %V of the hydrocarbons present in the feed is partially converted by known catalyst with steam into a product containing  $H_2$  and CO at a temperature from 400-1500°C, a pressure from 3-50 bar, and a space velocity from 600-1350 a (S.T.P.) hydrocarbons-containing feed/l catalyst/hour and from 3500-4500 l(S.T.P.) steam/l catalyst/hour,
- (b) product from step (a) and any remaining part of the feed is subjected to autothermal partial oxidation with an

oxygen-comprising gas at a temperature from 600-1100°C, a pressure from 10-50 bar and a space velocity from 5000-10000 l(S.T.P.)/1 catalyst/hour,

- (c) CO<sub>2</sub> is removed in a known manner from the product obtained from step (b) to obtain the synthesis gas, and wherein at least part of the CO<sub>2</sub> removed in step (c) is led to step (a) and/or (b).

Compl. 16 Pages.

Dr. 2 Sheets.

Ind. Cl. : 32 B [GROUP IX (1)].

167903

Int. Cl.<sup>4</sup> : C 07 C 7/00.

#### IMPROVED PROCESS FOR PRODUCING SWEETENED HYDROCARBONS.

Applicant : INSTITUT FRANCAIS DU PETROLE, A FRENCHBODY CORPORATE 1 ET 4 AVENUE DE BOIS PREAU 92502 RUEIL-MALMAISON, FRANCE.

Inventors : (1) HUBERT MIMOUN, (2) LUCIEN SAUSSINE, (3) SERGE BONNAUDET, (4) ALAIN ROBINE, (5) JEAN-PIERRE FRANCK.

Application No. 608/Mas/86 filed on July 30, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

3 Claims

An improved process for producing sweetened hydrocarbons from hydrocarbon charge containing sulfur compounds comprising the steps of : impregnating a supported catalyst such as hereinabove described with an anhydrous alcoholic solution containing at least one alkaline agent selected from the group consisting of sodium hydroxide, potassium hydroxide, lithium hydroxide and ammonia, percolating the said hydrocarbon charge containing the sulfur compounds over the supported catalyst in the presence of air till the level of sulfur compounds in the percolated hydrocarbon is at the desired level to obtain sweetened hydrocarbons, if desired, regenerating the supported catalyst by washing it with hot water or steam in order to remove the impurities accumulated on the carrier, reactivating the so-washed supported catalyst by the said anhydrous alcoholic solution containing the alkaline agent and continuing the sweetening process.

Compl. Specn. 15 Pages.

Dr. Nil.

Ind. Cl. : 190-D-[GROUP-XLIV(4)].

167904

Int. Cl.<sup>4</sup> : F 03 D 3/06.

#### A ROTOR FOR A WIND-DRIVEN GENERATOR.

Applicant : MAURICIO KLING, MAFFEISTRABE 4, D-8000 MUNCHEN 2, FED. REPUBLIC OF GERMANY, (CITIZEN OF COLUMBIA).

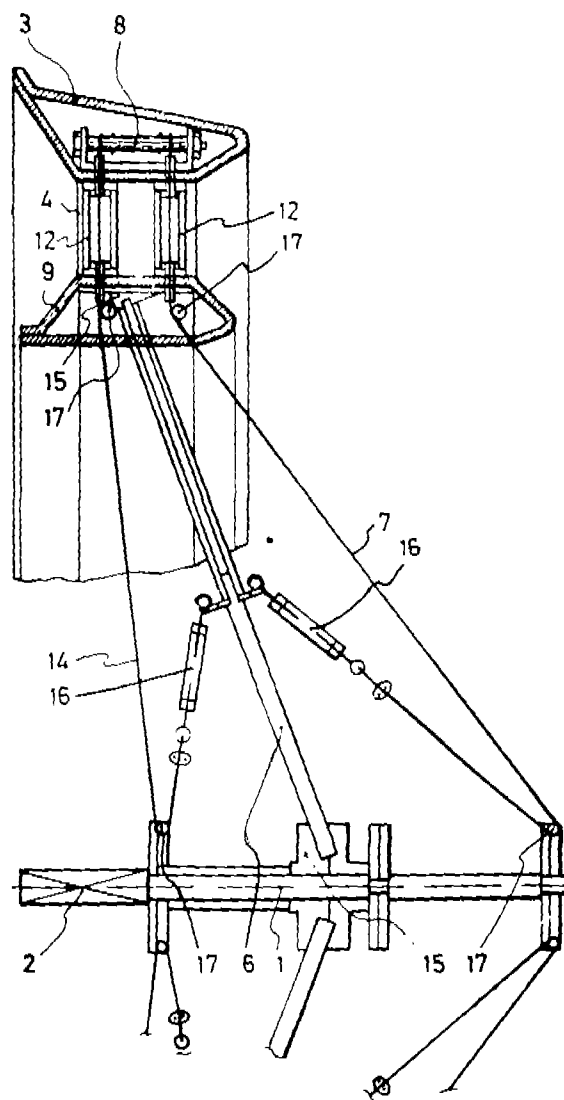
Inventor : ALBERTO KLING HEINZ.

Application No. 619/Mas/86 filed on August 1, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

18 Claims

A rotor for a wind-driven generator comprising a rotatably supported hub, the support being provided with an axial bearing means, an outer ring indirectly supported on said hub, and rotor blades which are fixed in an area between said hub and said outer ring, characterised in that the outer ring (3) is, in the circumferential direction, composed of a plurality of arcuate sections (5) and is essentially in the plane of rotation of the axial bearing means (2), and that the arcuate sections (5) of the outer ring (3) are under the action of flexible tension elements (7, 10, 14), which embrace said arcuate sections (5) at least partly in the circumferential direction, one end portion of each flexible tension element (7, 10, 14) being secured to a carrier ring.



Compl. Specn. 22 Pages.

Dr. 2 Sheets.

Ind. Cl. : 85-J-[GROUP-XXXI].

167905

Int. Cl.<sup>4</sup> : F 23 J 1/08.

#### AN IMPROVED PROCESS AND APPARATUS FOR SOLID FUEL GASIFICATION.

Applicant : THE DOW CHEMICAL COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, OF 2030, DOW CENTER, ABBOTT ROAD, MIDLAND, MICHIGAN 48640, U.S.A.

Inventors : (1) M. DALE MAYES, (2) WILLIAM P. WHITE, (3) FRANK A. RUIZ.

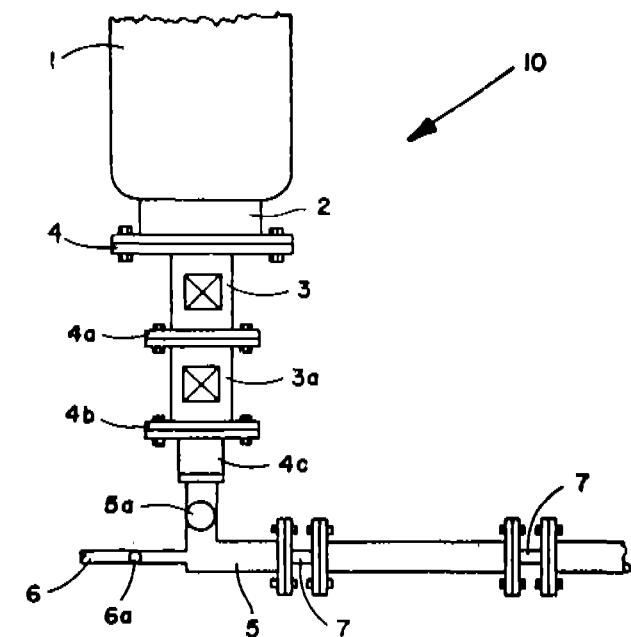
Application No. 642/Mas/86 filed on August 11, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

#### 8 Claims

An improved apparatus for solid fuel gasification, which comprises :

- (a) at least one crusher for reducing the particle size of the slag solids, said crusher being connected to the slag discharge end of a reactor; and
- (b) a conduit connected to the discharge end of the crusher through which the slag/water slurry continuously flows;
- (c) at least one restriction element disposed within the conduit, said element selected from (1) a pipe having a diameter, less than that of the conduit, (2) a wear resistant plate provided with an orifice having a diameter less than that of the conduit, (3) a frustoconical support provided with a wear-resistant cone-shaped line having an orifice less than that of the conduit and (4) a restriction plug having an orifice less than that of the conduit;
- (d) said restriction element restricting the continuous kinetic fluid flow of the slag/water slurry through the conduit, causing a reduction in the pressure of the slurry to a level below the pressure of the reactor.



Compl. Specn 16 Pages.

Drg. 2 Sheets.

Ind. Cl. : 108 C 3 [GROUP-XXXIII (5)].  
Int. Cl.<sup>4</sup> : C 21 C 7/00.

167906

AN IMPROVED PROCESS FOR THE PREPARATION OF UNALLOYED OR ALLOYED STEELS.

Applicant : MANNESMANN AKTIENGESSELLSCHAFT, OF MANNESMANNUFER 2, D-4000 DUSELDORF 1, FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) HORST-RAINER PAULS, (2) ERHARD PFEIL, (3) MARIAN VELIKONJA.

Application No. 654/Mas/86 filed on August, 13, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

#### 5 Claims

An improved process for the preparation of unalloyed and alloyed steels which comprises feeding oxygen into the melt contained in a reactor till it dissolves in the melt without forming undesired oxidation products, flushing the melt with an inert gas till the dissolved oxygen has been consumed, recharging the melt with oxygen, repeating the flushing and recharging until the desired final melt is obtained wherein the blow rate of oxygen, expressed as  $Nm^3/min \times t$  is always 1 to 5 times greater than the blow rate of inert gas wherein  $Nm^3/t \times min$  stands for normal cubicmeter per ton per minute.

Compl. Specn. 7 Pages.

Drg. 1 Sheet.

Int. Cl. : 32 B [GROUP IX (1)].  
Int. Cl.<sup>4</sup> : C 10 C 3/06.

167907

METHOD FOR FURTHER PROCESSING THE RESIDUE LEFT AFTER VACUUM DISTILLATION IN A CRUDE OIL REFINERY.

Applicant : BUSS AG, OF LAUTENGARTENSTRASSE 7, CH-4052 BASEL, SWITZERLAND, A SWISS COMPANY.

Inventor : PETER KAPPENBERGER.

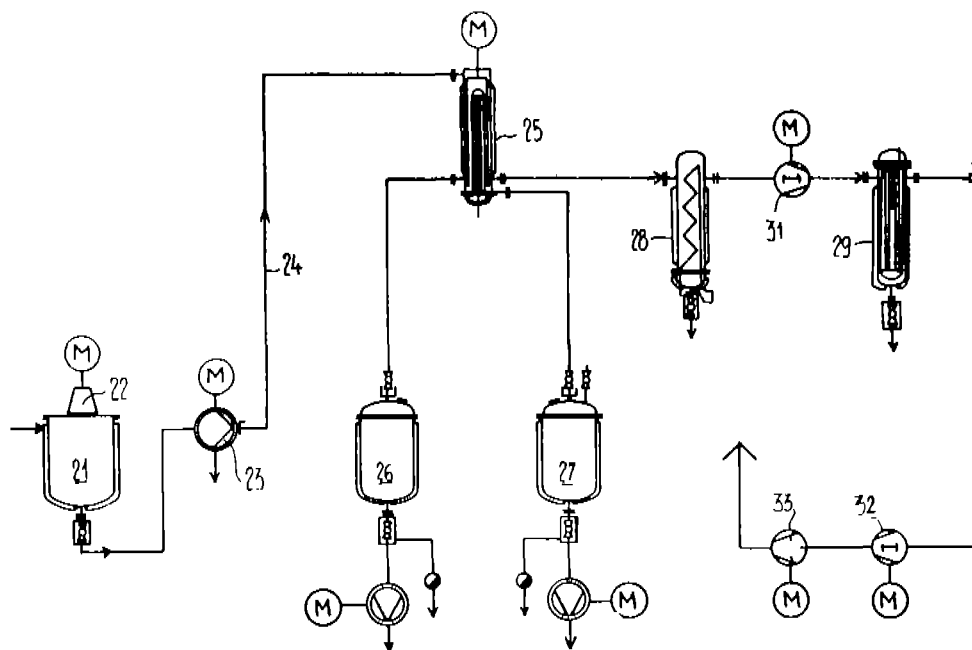
Application No. 689/Mas/86 filed on 28th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

#### 10 Claims

A method for the further processing of a residue left behind during vacuum distillation in a crude oil refinery comprising the steps of

subjecting the crude oil vacuum distillation residue to thin-film short-path distillation under vacuum at an evaporator surface in order to obtain a distillate and concentrated residue; said step comprising the passing of the crude oil vacuum distillation residue in the form of thin film along the evaporator surface in contact therewith, wherein the evaporator surface is heated to a temperature appreciably higher than the temperature of the crude oil vacuum distillation residue left behind during vacuum distillation and wherein the distillation residue is subjected to the combined action of vaporization and the thermal decomposition at the heated evaporator surface, the concentrated residue being taken off separately.



Compl. Specn. 14 Pages.

Drq. 2 Sheets.

Ind. Cl. : 158 A, 158 E<sub>4</sub> [GROUP LII (2)]  
Int. Cl.<sup>4</sup> : B 61 F 5/52.

167908

#### SELF-STEERING RAILWAY TRUCK.

Applicant : GENERAL MOTORS CORPORATION, AN AMERICAN COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE, IN THE UNITED STATES OF AMERICA, OF 3044 WEST GRAND BOULEVARD, DETROIT, MICHIGAN 48202, UNITED STATES OF AMERICA.

Inventors : (1) DAVID JASON GODING, (2) MOSTAFA RASSAIAN.

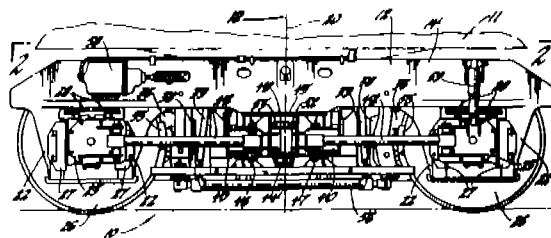
Application No. 701/Mas/86 filed on September 1, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

19 Claims

A self-steering railway truck, characterised in that the truck comprises a pair of longitudinally spaced rail-engaging wheel and axle members (24, 26) each having a pair of wheels (26) laterally interconnected by an axle (24), a frame (12) having a central longitudinal and vertical plane (19) and carried near opposite ends thereof by the said axles (24), yieldable retaining and suspension means (23, 24, 27, 28) supporting the frame (12) on the axles (24) and nominally urging the wheel and axle members (24, 26) into centred positions for motion along straight paths aligned with the central plane (19) but permitting limited self-induced yawing of the members (24, 26) during movement along curved paths, and a plurality of force-transmitting linkages (50, 42, 43, 44, 46, 47) each connecting a respective one of the wheel and axle members (24, 26) to the frame (12), each of the linkages (40, 42, 43, 44, 46, 47, 48, 50) having a lateral steering beam (40) and a pair parallel connecting rods (42), each steering beam (40) having a centre (46, 47) pivotally connected to the frame (12) in the central plane (19) and

being free from any connection to an associated carbody except by way of the frame (12), and the connecting rods (42) nominally extending in planes parallel to the central plane (19) and pivotally connecting points on the steering beams (40) laterally opposite to and equidistant from their centres to points of the wheel and axle members (24, 26) longitudinally aligned with their interconnected steering beam points to carry longitudinal forces from the wheels (26) to the truck frame (12) without causing significant yaw forces in the wheel and axle members (24, 26).



Compl. Specn. 17 Pages.

Drq. 3 Sheets.

Ind. Cl. : 172 C 1 [GROUP XX]  
Int. Cl.<sup>4</sup> : D 01 G, 15/00.

167909

#### CYLINDER FOR CARDING MACHINES.

Applicant : SCHUBERT & SALZER MASCHINENFABRIK AKTIENGESELLSCHAFT OF FRIEDRICH-EBERT-STRASSE 84, 8070 INGOLSTADT, GERMANY, A WEST GERMAN CORPORATE BODY.

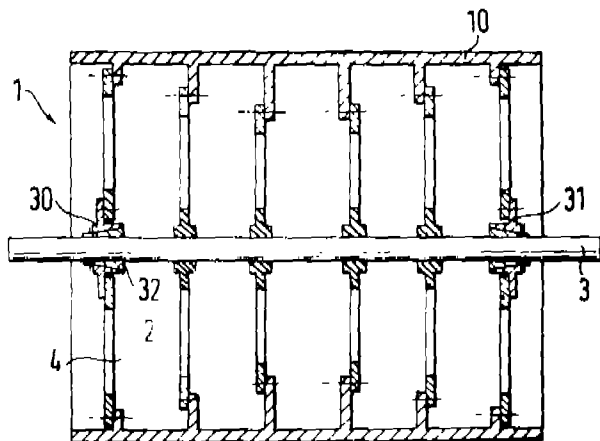
Inventor : HANS LANDWEHRKAMP.

Application No. 748/Mas/86 filed on September 23, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

## 12 Claims

A cylinder for carding machines, the casing of which is made from sheet steel and is supported at its ends by hubs fixed to a drive shaft, wherein the cylinder is internally divided into cells by radial bracing members connected to the casing.



Compl. Specn. 9 Pages.

Dr. 1 Sheet.

Ind. Cl. : 146-D<sub>1</sub>-(GROUP XXXVIII(2))  
Int. Cl.<sup>4</sup> : B 05 D 5/12

167910

A PROCESS FOR PREPARING A FRONT OR REAR SURFACE ELECTRICALLY CONDUCTING SILVER REFLECTOR HAVING IMPROVED OPTICAL AND DURABILITY PROPERTIES AND THE REFLECTOR SO PREPARED.

Applicant : INDIAN SPACE RESEARCH ORGANISATION, DEPARTMENT OF SPACE, 'F' BLOCK, CAUVERY BHAVAN, DISTRICT OFFICE ROAD, BANGALORE-560 009.

Inventors : (1) THUTUPALLI GOPALA KRISHNA MURTHY, (2) RAMASAMY PALANISAMY, (3) MAHADEVA SARMA VISWANATHAN, (4) CHANNAMALLAPPA LINGARAJU NAGENDRA.

Application and Provisional Specification No. 786/Mas/86 filed on October 6, 1986.

Complete Specification left September 30, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

## 3 Claims

A process for preparing a front or rear surface electrically conducting silver reflector having improved optical and durability properties, comprising the steps of :

- cleaning the substrate (such as glass and quartz) in a conventional manner,
- depositing in a manner known *per se* tantalum pentoxide or any other transparent oxide such as yttrium oxide and cerium oxide as a binding layer, preferably to a thickness around 1000 Å, on one side of the cleaned substrate,

(c) depositing silver on the binding layer to a thickness around 800—1000 Å in a conventional manner,

(d) depositing at least one protective layer the first protective layer deposited being a layer of tantalum pentoxide or any other transparent dielectric material such as yttrium oxide, cerium oxide, strontium fluoride and magnesium fluoride to a thickness in the range from 500—800 Å, on the silver layer.

Prov. Specn. 5 Pages.

Compl. Specn. 28 Pages.

Dr. Nil.

Ind. Cl. : 186 E & 206 E

167911

Int. Cl.<sup>4</sup> : H 04 1/04

APPARATUS FOR TESTING IN RAPID SUCCESSION EACH OF A MULTIPlicity OF SHEETS IN A SEPARATE OR CONTINUOUS FORM.

Applicant : THE GOVERNOR AND COMPANY OF THE BANK OF ENGLAND, OF THREADNEEDLE STREET, LONDON EC 2 R 8AH, ENGLAND, A BRITISH COMPANY.

Inventor : BRUCE KELLY.

Application for Patent No. 488/Del/1986 filed on 19th June, 1985.

Convention date June 22, 1984/8415996/(U.K.).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

## 2 Claims

Apparatus for testing in rapid succession each of a multiplicity of sheets in separate or continuous form for tolerable correspondence with a master sheet, comprising means for presenting said sheets in rapid succession; means for scanning each sheet synchronously with a presentation thereof, said means for scanning being positioned from where it can scan said sheet, to provide or each sheet a multiplicity of pixels each represented by a brightness value; a plurality of comparator systems, each being provided to define a respective one of a plurality of ranges of brightness values; said comparator system being connected to means for presenting, for each pixel, a respective digital data word of which each bit position corresponds to a respective one of said ranges, means responsive to the digital data word being coupled to the comparator systems for allowing effective comparison of the brightness value of each pixel with each brightness range for which the respective bit in the data word has a first binary value; and means for detecting when the brightness value of a pixel is outside a range with which it is compared, said detection means being connected to said comparator system.

Compl. Specn. 28 Pages.

Dr. 4 Sheets.

Ind. Cl. : 116C, 80K

167912

Int. Cl.<sup>4</sup> : B 65 G 37/00, B01D, 29/02

AN IMPROVED CONVEYOR BELT FILTER HAVING A FRICTION REDUCING BUFFER MEANS.

Applicant & Inventor : GUY GAUDFRIN, A FRENCH CITIZEN OF ALLEE DU BEC DE CANARD, GOLF, 78860 SAINT NOM LA BRETECHE, FRANCE.

Application for Patent No. 922/Del/85 filed on November 4, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

### 13 Claims

An improved conveyor belt filter having a friction reducing buffer means located between a conveyor belt and a fixed vacuum box in the belt filter, comprising a single endless friction belt, which is not integral with the conveyor belt wherein said friction belt is driven by said conveyor belt and guided over the vacuum box, and said friction belt comprises cavities provided with communication apertures which correspond with an upper opening of the vacuum box, said cavities being wider than the discharge holes provided substantially in the center of the conveyor belt.

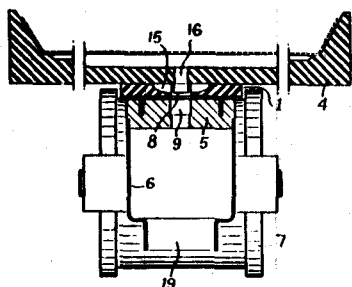


Fig. 1

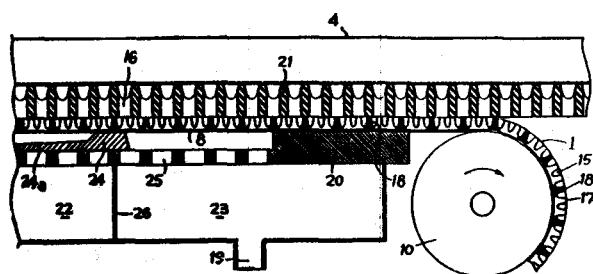


Fig. 6

Compl. Specn. 16 Pages.

Drg. 5 Sheets.

Ind. Cl. : 84 B  
Int. Cl.<sup>4</sup> : C 10 L — 1/18, 1/22

167913

### A FUEL OIL COMPOSITION.

Applicants : EXXON CHEMICALS PATENTS INC., A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 200 PARK AVENUE, FLORHAM PARK, NEW JERSEY 07932, UNITED STATES OF AMERICA.

Inventors : BLACKSHAW HENRY EDWARD, CLAYDON DAVID JOHN, TAYLOR MALCOLM GRAVES & ILYNCKY STEPHAN.

Application for Patent No. 360/Del/1986 filed on April 23, 1986.

Convention date 26th April & 16th December, 1985/8510721, 8530907/(U.K.).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

### 12 Claims

A fuel oil composition comprising a fuel oil such as herein described and an additive having a mixture of 20 to 40 wt % of a phenol such as polyphenol, a sulphurised polyphenol or a hindered phenol and 80 to 60 wt % of a cyclic amide as herein described and a polyalkylene polyamine having at least 2 nitrogen atoms and at least 3 carbon atoms (other than carbon atoms in the branched substituents) between the terminal amino groups; said additive being present in the composition between 0.00001 to 20 wt %.

Compl. Specn. 22 Pages.

Drg. 4 Sheets.

Ind. Cl. : 71 G [XXXVIII (1)]  
Int. Cl.<sup>4</sup> : E 21 F 15/08

167914

### A METHOD FOR THE MANUFACTURE OF A PUMBLE MATERIAL FOR USE IN FORMING A BACK FILL OF HIGH STRENGTH IN A MINE OR TUNNEL.

Applicant : FOSROC INTERNATIONAL LIMITED, A BRITISH COMPANY, OF MANUFACTURES OF CHEMICAL PRODUCTS OF 285 LONG ACRE, NECHILLS, BIRMINGHAM, ENGLAND.

Inventors : JEFFREY GEORGE HAIGH & ANDREW JEREMY MARSH.

Application for Patent No. 564/Del/1986 filed on June 27, 1986.

Convention date July 4th, 1985/85. 16961.U.K.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

### 9 Claims

A method for the manufacture of a pumpable material for use in forming a backfill of high strength in a mine or tunnel which comprises adding to a slurry containing from 52.50 to 74 wt. % of fines of the kind such as herein described derived from the treatment of ore bearing rocks and 13.50 to 28.0 wt. % of water, an additive comprising from 4.9 to 10.49 wt. % of a settable reinforcing material of the kind such as herein described having a rate of setting such that the material will not set while the slurry is being pumped, 0.5 to 1 wt. % of a lubricant of the kind such as herein described to facilitate the pumpability of the slurry, and 0.5 to 1 wt. % of plasticiser of the kind such as herein described to exert a plasticising effect on the solids of the slurry, so that the slurry may be readily pumped, said slurry being adapted to settle in layers in said mine or tunnel to form a set material substantially free of weakening voids.

Compl. Specn. 19 Pages.

Drg. 1 Sheet.

Ind. Cl. : 116 C  
Int. Cl.<sup>4</sup> : F 16 G 5/70

167915

### DOUBLE-ACTING POSITIVE DRIVE POWER TRANSMISSION BELT.

Applicant : UNIROYAL POWER TRANSMISSION COMPANY, INC., A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF NEW JERSEY, ONE OF THE UNITED STATES OF AMERICA, LOCATED AT WORLD HEADQUARTERS, MIDDLEBURY, CONNECTICUT 06749 (U.S.A.).

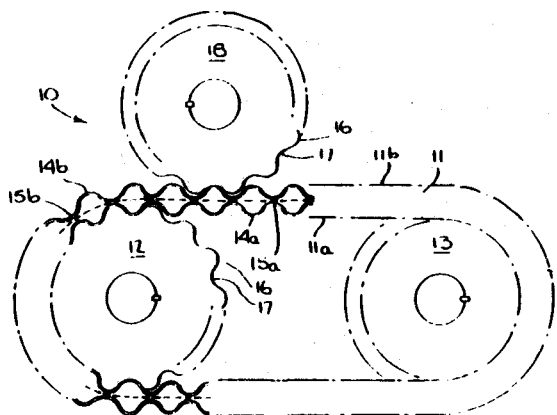
Inventors : ALEXANDER ROMAN SLONIEWSKY & WILLIAM ALBERT SKURA.

Application for Patent No. 659/Del/86 filed on July 22, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

#### 7 Claims

A double-acting positive drive power transmission belt comprising an elastomeric body portion (22) having first and second peripheral surfaces, a tensile band (23) embedded in the body portion, a first plurality of elastomeric teeth (14a) integral with the body portion and located along one of said peripheral surfaces, and each tooth having a first jacket (24a) formed over the teeth and over the land portions (15a) between the teeth of said first plurality of teeth and cooperating with said teeth such that each tooth of the first plurality of teeth has a spring rate, a second plurality of elastomeric teeth (14b) integral with the body portion and located along the other of said peripheral surfaces, a second jacket (24b) formed over the teeth and over the land portions (15b) between the teeth of said second plurality of teeth and cooperating with said teeth such that each tooth of the second plurality of teeth has a spring rate characterized in that the first jacket (24a) includes a substantially non-stretchable fabric, and the second jacket (24b) includes a stretchable fabric wherein the teeth (14b) covered with the stretchable fabric jacket have a spring rate that is greater than the spring rate of the more flexible teeth (14a) covered with the substantially non stretchable fabric jacket.



Compl. Specn. 22 Pages.

Drng. 4 Sheets.

Ind. Cl. : 32 E IX (1)  
Int. Cl.<sup>4</sup> : C 08 F 210/00

167916

PROCESS FOR PRODUCING COPOLYMERS OF ETHYLENE; ALPHAOLEFIN AND NONCONJUGATED POLYENE.

Applicant : UNIROYAL CHEMICAL COMPANY, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW JERSEY, ONE OF THE UNITED STATES OF AMERICA, LOCATED AT WORLD HADQUARTERS, MIDDLEBURY, CONNECTICUT 06749, UNITED STATES OF AMERICA.

Inventors : YOUNG SUNG RIM & DEMETREOS NESTOR MATHEWS.

Application for the Patent No. 846/Del/86 filed on September 24, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

#### 7 Claims

A process for producing a copolymer of ethylene, an alphaolefin having the formula  $HC_2 = CHR$  Wherein R is an alkyl radical containing from 1 to 10 carbon atoms and nonconjugated polyene as herein described, said copolymer having :

- (a) a number average molecular weight of between 250 and 20,000 and;
- (b) a viscosity index of at least 75; said polymer exhibiting vinylidene-type unsaturation such that one end of the polymer will be of the formula  $P-CR=CH_2$  wherein P represents the polymer chain and R is as defined above; said process comprising reacting ethylene nonconjugated polyene and said alphaolefin at between 20° and 100°C in the presence of a catalyst composition comprised of :
  - (A) a catalyst having the formula  $Q_n MX_{4-n}$  wherein Q is cyclopentadiene, cyclopentadiene substituted with up to five C<sub>1</sub>-C<sub>6</sub> alkyl groups, or idene; M is zirconium, titanium or hafnium; X is C<sub>1</sub>-C<sub>4</sub> alkyl, halogen,  $CH_2ALR'^2$ ,  $CH_2CH_2ALR'^2$  or  $CH_2CH(ALR'^2)_2$  wherein R' is C<sub>1</sub>-C<sub>6</sub> alkyl or OH1 (C<sub>1</sub>-C<sub>6</sub> alkyl)<sub>2</sub>, and n is 1, 2, or 3; and
  - (B) an aluminoxane cocatalyst having the linear formula (a)  $R_2-2ALO-(AIR'O)_n$  or the cyclic formula (b)  $(-ALR'O-)_{n+2}$  wherein R is linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl and n is an integer of 2-40; wherein the Al/M molar ratio (wherein N is as defined above) is between 10 and 10,000.

Compl. Specn. 23 Pages.

Drng. Nil.

Ind. Cl. : 32 E.  
Int. Cl.<sup>4</sup> : C 08 F 210/00 & 210/02.

167917

PROCESS FOR THE PREPARATION OF COPOLYMERS OF CARBON MONOXIDE, ETHENE AND OLEFINICALLY UNSATURATED HYDROCARBONS.

Applicant : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., A NETHERLANDS COMPANY, OF CAREL VAN BYLANDTLAAN 30, 2596 HR THE HAGUE, THE NETHERLANDS.

Inventor : EIT DRENT.

Application for Patent No. 923/Del/86 filed on October 20, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

## 4 Claims

Process for the preparation of copolymers of carbonmonoxide, ethene and olefinically unsaturated hydrocarbons as herein described wherein a mixture of carbon monoxide and ethene and, one or more other olefinically unsaturated hydrocarbons, is polymerised using a catalyst composition comprising :

- (a) a compound of Group VIII metal chosen from palladium, cobalt and nickel,
- (b) an anion of an acid as herein described with a  $pK_A$  of less than 6, and
- (c) a bidentate ligand of the general formula  $R^1R^2-M-R^3R^4$ , wherein M represents phosphorus, arsenic or antimony, R is a bivalent organic bridging group containing two or three carbon atoms in the bridge and  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  represent hydrocarbon groups,

characterised in that at least one hydrogen atom in at least one of the groups  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  is substituted with a polar substituent as herein described.

Compl. Specn. 12 Pages.

Ind. Cl. : 119 F: XXI (3).  
Int. Cl.<sup>4</sup> : D 03 D 47/00.

167918

**AN APPARATUS FOR REMOVING A FAULTY WEFT ON A JET LOOM.**

Applicant : TSUDAKOMA KOGYO KABUSHIKI KAISHA, OF 18-18 NOMACHI 5-CHOME, KANAZAWA-SHI, ISHIKAWA-KEN, JAPAN, A JAPANESE COMPANY.

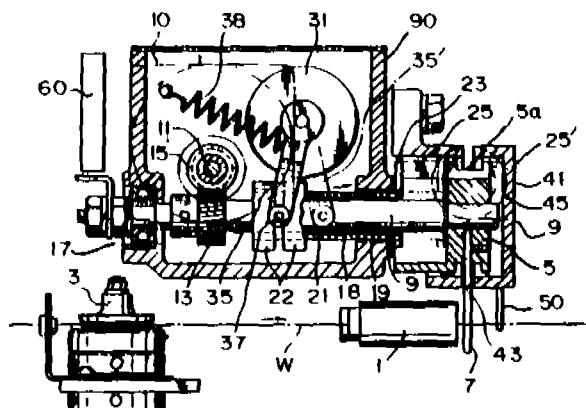
Inventor : MITURU SUWA.

Application for the Patent No. 1044/Del/86, filed on November 28, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

## 5 Claims

An apparatus for removing a faulty weft on a jet loom having a main jet nozzle, said apparatus comprising a rotary take-up drum located above and just in front of said main jet nozzle, a hook pin connected to said drum and extending radially downwards and means for registering said hook pin at a predetermined first position which is out of moving ambit of a weft during normal running of said jet loom and for registering at a predetermined second position to capture a faulty weft connected to said main jet nozzle and to wind it on said take-up drum, when there is a faulty weft insertion, said registering means being connected to said take-up drum.



Compl. Specn. 12 Pages.

Drg. 2 Sheets.

Ind. Cl. : 32 F: (a).

167919

Int. Cl.<sup>4</sup> : C07C 27/10, 51/00, 63/14.

**A PROCESS FOR RECOVERY OF DIMETHYL TEREPHTHALATE FROM CATIONIC DYEABLE POLYETHYLENE TEREPHTHALATE WASTE.**

Applicant : PRINCIPAL SCIENTIST & HEAD SIR PADAMPAT RESEARCH CENTRE, (A DIVISION OF J. K. SYNTHETICS LTD.) OF JAYKAYNAGAR, KOTA-324003 RAJASTHAN, INDIA. AN INDIAN NATIONAL.

Inventors : ASHOK AMURAT VAIDYA & KRISHNAPAT-RUNT VARAHA NARRASIMHAM, PURSHOTTAM SHARMA.

Application for the Patent No. 4/Del/87 filed on January 2, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

## 3 Claims

A process for the recovery of dimethyl terephthalate from modified cationic dyeable polyethylene terephthalate waste which comprises in subjecting said waste to the step of methanolysis in the presence of catalyst as herein described at a temperature of 180 to 200°C, cooling the reaction mixture to a temperature of 25° to 50° C, filtering the cooled mixture to obtain a residue consisting of dimethyl terephthalate, subjecting dimethyl terephthalate to the steps of washing drying and then purification, such as by vacuum distillation, wherein said vacuum distillation is carried out in the presence of sodium carbonate in order to reduce acid number of the distilled dimethyl terephthalate.

Compl. Specn. 9 Pages.

Drg. Nil.

Ind. Cl. : 40 B.

167920

Int. Cl.<sup>4</sup> : H01M 4/88.

**A PROCESS FOR THE PREPARATION OF AN ANODE.**

Applicant : NATIONAL RESEARCH DEVELOPMENT CORPORATION OF INDIA, (A GOVERNMENT OF INDIA ENTERPRISE) OF 20-22 ZAMROODPUR COMMUNITY CENTRE, KAILASH COLONY EXTN., NEW DELHI-110 048.

Inventors : SURESH PHADKE, HARIPALSINGH MURLI-SINGH SONAWAT AND GIRJESH GOVIL.

Application for Patent No. 76/Del/87 filed on January 30, 1987.

Complete Specification left on 18th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

## 7 Claims

A process for the preparation of an anode having protein as a catalyst thereon for use in a biochemical fuel cell, comprises in the steps of oxidation of carbon electrode as herein described for immobilizing flavin adenine dinucleotide (FAD) on said carbon electrode, subjecting said electrode to the step of reduction, subjecting said reduced electrode to the step of bromination, said brominated electrode being subjected to the step of condensation as herein described, treating said electrode in chloroform with triphenyl phosphine and then refluxing said electrode for providing at least 3 carbon chains, incubating said electrode with apoenzyme prepared as herein described at room temperature till said apoenzyme with the FAD forms a protein catalyst on the said anode, said electrode preferably being subjected to said steps of condensation and treatment for providing 5 carbon chains.

Compl. Specn. 11 Pages.

Drg. 1 Sheet.



### DESIGN CANCELLATION PROCEEDING (SECTION 51A)

"An application made by Hindustan Vacuum Glass Ltd. for cancellation of the registration of Design No. 161188 in Class 3 in the name of Solar Flask".

### REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries is the date of registration in the entry.

- Class 1.** No. 162089. Indian Institute of Technology of Hauz Khas, New Delhi-110016, India. "Weighing Machine". May 11, 1990.
- Class 1.** No. 162165. Premier Irrigation Equipment Limited, Indian Company of 17/1C, Alipore Road, Calcutta-700027, West Bengal, India. "Liquid Sprinkler". June 1, 1990.
- Class 1.** No. 162312. Jay Industries, A-67/2, G. T. Karnal Road, Delhi-110033, India, Indian Partnership Concern. "Ignition starter switch with anti-theft device". July 11, 1990.
- Class 1.** No. 162486. Hitesh Shamjibhai Shah, Indian of Gopipura, Dahanu Road, Dist. Thane, Maharashtra, India. "Spoon". September 11, 1990.
- Class 1.** No. 162520. Topack Industries (I) Pvt. Ltd. of 415, Swastik Chambers, Sion Trombay Road, Chembur, Bombay-400071, Maharashtra, India, Indian Company. "Twoer Packing Ring of Metal". September 20, 1990.
- Class 3.** No. 161954. Smt. Vandana Jaymukhbhai Doshi of Quality Company of Lal Bamba Bazar Line, Green Chowk, Morbi-363641, Gujarat, India. "Wall Clock Cabinet". March 20, 1990.
- Class 3.** No. 161974. Mehta Clock, Behind State Bank of Saurashtra, Morbi, Gujarat, India, Partnership Firm. "Wall Clock Cabinet". March 23, 1990.
- Class 3.** No. 162151. Plastella of 91, Swami Vivekanand Road, Borivli, West, Bombay-400092, Maharashtra, India. "Comb". May 28, 1990.
- Class 3.** No. 162157. Telemecanique, 43-45, Boulevard Franklin Roosevelt, 92500 Rueil Malmaison, France, "Case for a Disconnector". May 29, 1990.
- Class 3.** No. 162203. Phenoweld Polymer Pvt. Ltd. of Saki Vihar Lake Road, Bombay-400072, Maharashtra, India, Indian Company. "Flushing Lever". June 13, 1990.
- Class 3.** No. 162205. Phenoweld Polymer Pvt. Ltd. of Saki Vihar Lake Road, Bombay-400072, Maharashtra, India, Indian Company. "Arm for float". June 13, 1990.
- Class 3.** No. 162206. Phenoweld Polymer Pvt. Ltd. of Saki Vihar Lake Road, Bombay-400072, Maharashtra, India, Indian Company. "Ball Valve". June 13, 1990.
- Class 3.** No. 162208. Phenoweld Polymer Pvt. Ltd. of Saki Vihar Lake Road, Bombay-400072, Maharashtra, India, Indian Company. "Syphon pipe". June 13, 1990.
- Class 3.** No. 162235. Plastella of 91, Swami Vivekanand Road, Borivli (W), Bombay-400092, Maharashtra, India, Indian Partnership Firm. "Comb". June 18, 1990.
- Class 3.** No. 162236. Nallanchi Chodaparambil Ashok, Indian, Flat No. 1, Bldg. No. A 6/19, Vima Vijay Society, Jeeven

Bima Nagar, Borivli (W), Bombay 400013, Maharashtra, India. "A device for collecting water samples". June 18, 1990.

- Class 3.** No. 162283. Advance Lab. of 11 Below Shantidoot Hotel, Dr. Ambedkar Road, Dadar, Bombay-400014, Maharashtra, Indian Partnership Firm. "Bottle". July 6, 1990.
- Class 3.** No. 162284. Ganga Chemical Industries of 819 B, Riddhi-Siddhi, Shahid Mangal Pandey Marg, Mulund (West), Bombay-400080, Maharashtra, India, Indian Partnership Firm. "Container". July 6, 1990.
- Class 3.** No. 162299. Luxor Pen Company, 229, Okhla Industrial Estate, Phase III, New Delhi-110020, India, an Indian Company. "Pen". December 6, 1990.
- Class 3.** No. 162300. Davinder Kumar Jain, 229-Okhla Industrial Estate, Phase III, New Delhi-110020, India, an Indian National. "Pen". July 10, 1990.
- Class 3.** No. 162353. Crystal Plastics & Metallizing Pvt. Ltd., Sanghi House, Palkhi Galli, Off Veer Savarkar Marg, Prabhadevi, Bombay-400025, Maharashtra, India. "Comb". July 24, 1990.
- Class 3.** No. 162365. Bonjour International of 5762/6, New Chandrawal Jawahar Nagar, Delhi-110007, India, a Proprietorship Concern. "Vacuum Jug". July 27, 1990.
- Class 3.** No. 162424. Emsons Industries, 11, Main Market, Subhash Nagar, New Delhi, India, Indian Partnership Firm. "Hand Shower". August 20, 1990.
- Class 3.** No. 162491. Meher Distilleries Pvt. Ltd., Indian Company, Village Aswa, Tehsil Dehnu, Dehnu Road, Dist. Thane, Maharashtra, India. "Bottles". September 11, 1990.
- Class 3.** No. 162522. Rainbow Cosmetics, 50C, Bangur Avenue, Calcutta-700055, W.B., India, Proprietary Firm. "Container". September 21, 1990.
- Class 3.** No. 162530. Colgate-Palmolive Company, Delaware Corporation of 300 Park Avenue, New York 10022, U.S.A. "Toothbrush". September 24, 1990.
- Class 3.** No. 162538. ICT Industries, a Partnership Firm, Swastik Industries Compound, Chincholi Bunder Road, Off S. V. Road, Malad (West), Bombay-400064, Maharashtra, India. "Magazine Stand". October 1, 1990.
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- Class 12.** No. 162552. Britannia Industries Ltd. of 5/1A, Hungerford Street, Calcutta-700017, W. B., India, Indian Company. "Biscuit". October 8, 1990.
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